

Decoplast FastGrip Spray Foam Insulation Adhesive Canister

Greenmaker Industries

Version No: 4.8
Safety Data Sheet according to OSHA HazCom Standard (2024) requirements

Issue Date: 04/21/2025
Print Date: 04/21/2025
S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	Insulation Adhesive Canister
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	Chemical under pressure, flammable, n.o.s. (contains 1,1-difluoroethane)
Chemical formula	Not Applicable
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Use according to manufacturer's directions.
--------------------------	---

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	QUIN GLOBAL US, inc.
Address	5510 F Street OMAHA, NE 68117 United States
Telephone	402 731 3636
Website	www.quinglobal.com
Email	info.us@quin-global.com

Emergency phone number

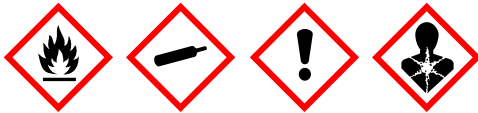
Association / Organisation	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	+1 855-237-5573
Other emergency telephone number(s)	+61 3 9573 3188

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

Classification	Chemical Under Pressure Category 2, Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity (Inhalation) Category 4, Sensitisation (Respiratory) Category 1, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Specific Target Organ Toxicity - Repeated Exposure Category 2, Simple Asphyxiant
----------------	--

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

H283	Flammable chemical 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.
H373	May cause damage to organs through prolonged or repeated exposure. (Respiratory system) (Inhalation)
	May displace oxygen and cause rapid suffocation

Hazard(s) not otherwise classified
Not Applicable

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P260	Do not breathe gas or vapors.
P271	Use only outdoors or in a well-ventilated area.
P284	Wear respiratory protection.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing must not be allowed out of the workplace.

Precautionary statement(s) Response

P370+P378	In case of fire: Use alcohol resistant foam or fine spray/water fog to extinguish.
P376	Stop leak if safe to do so.
P381	Eliminate all ignition sources if safe to do so.
P312	Call a POISON CENTER or doctor if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a physician.
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 attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

P405	Store locked up.
P410+P403	Protect from sunlight. Store in a well-ventilated place.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
------	--

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
157905-72-1	30-60	<u>methylenediphenyl diisocyanate (MDI)/ polyol prepolymer</u>
101-68-8	15-40	<u>4,4'-diphenylmethane diisocyanate (MDI)***</u>
6425-39-4	.5-5	<u>2,2'-dimorpholinodiethyl ether</u>
75-37-6	10-30	<u>1,1-difluoroethane</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	If product comes in contact with eyes: ▶ Immediately hold eyelids apart and flush the eye continuously with running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Continue flushing until advised to stop by a doctor, or for at least 15 minutes. ▶ Transport to hospital or doctor. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
-------------	---

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted. ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay.
Ingestion	Not considered a normal route of entry.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).

For poisons (where specific treatment regime is absent):

BASIC TREATMENT

- ▶ Establish a patent airway with suction where necessary.
- ▶ Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- ▶ Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- ▶ Monitor and treat, where necessary, for pulmonary oedema .
- ▶ Monitor and treat, where necessary, for shock.
- ▶ Anticipate seizures.
- ▶ DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

SECTION 5 Fire-fighting measures**Extinguishing media**

- ▶ Small quantities of water in contact with hot liquid may react violently with generation of a large volume of rapidly expanding hot sticky semi-solid foam.
- ▶ Presents additional hazard when fire fighting in a confined space.
- ▶ Cooling with flooding quantities of water reduces this risk.
- ▶ Water spray or fog may cause frothing and should be used in large quantities.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
-----------------------------	--

Special protective equipment and precautions for fire-fighters

Fire Fighting	▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard	- Combustible. - Contents under pressure: container may burst if heated. - Moderate fire hazard when exposed to heat or flame. - When heated to high temperatures decomposes rapidly generating vapor which pressures and may then rupture containers with release of flammable and highly toxic isocyanate vapor. - Burns with acrid black smoke and poisonous fumes. - Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Combustion products include: - carbon monoxide (CO) - carbon dioxide (CO₂) - isocyanates - hydrogen cyanide - and minor amounts of - nitrogen oxides (NO_x) - other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

SECTION 6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Eliminate ignition sources. Ventilate the area. See section 8.

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	▶ Clean up all spills immediately. ▶ Avoid breathing vapors and avoid contact with skin and eyes. ▶ Control personal contact with the substance, by using protective equipment. ▶ Contain and absorb spill with sand, earth, inert material or vermiculite.
---------------------	--

Continued...

	Place in a suitable, labelled container for waste disposal.
Major Spills	For isocyanate spills of less than 40 litres (2 m2): - Evacuate area from everybody not dealing with the emergency, keep them upwind and prevent further access, remove ignition sources and, if inside building, ventilate area as well as possible. - Notify supervision and others as necessary. - Put on personal protective equipment (suitable respiratory protection, face and eye protection, protective suit, gloves and impermeable boots). - Control source of leakage (where applicable). - Dike the spill to prevent spreading and to contain additions of decontaminating solution. - Clear area of all unprotected personnel and move upwind. - Alert Emergency Authority and advise them of the location and nature of hazard. - May be violently or explosively reactive. - Wear full body clothing with breathing apparatus. - Prevent by any means available, spillage from entering drains and water-courses. - Remove leaking cylinders to a safe place. - Fit vent pipes. Release pressure under safe, controlled conditions - Burn issuing gas at vent pipes. - DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapors
Other information	- Store in original containers. - Keep containers securely sealed. - Store in a cool, dry, well-ventilated area. - Protect container against physical damage and check regularly for leaks.

Conditions for safe storage, including any incompatibilities

Suitable container	- Ensure the use of equipment rated for cylinder pressure. - Cylinder must be properly secured either in use or in storage.
Storage incompatibility	Avoid reaction with water, alcohols and detergent solutions. Isocyanates are electrophiles, and as such they are reactive toward a variety of nucleophiles including alcohols, amines, and even water. Upon treatment with an alcohol, an isocyanate forms a urethane linkage. If a di-isocyanate is treated with a compound containing two or more hydroxyl groups, such as a diol or a polyol, polymer chains are formed, which are known as polyurethanes. Reaction between a di-isocyanate and a compound containing two or more amine groups, produces long polymer chains known as polyureas. - A range of exothermic decomposition energies for isocyanates is given as 20-30 kJ/mol. - The relationship between energy of decomposition and processing hazards has been the subject of discussion; it is suggested that values of energy released per unit of mass, rather than on a molar basis (J/g) be used in the assessment. - For example, in "open vessel processes" (with man-hole size openings, in an industrial setting), substances with exothermic decomposition energies below 500 J/g are unlikely to present a danger, whilst those in "closed vessel processes" (opening is a safety valve or bursting disk) present some danger where the decomposition energy exceeds 150 J/g. BREThERICK: Handbook of Reactive Chemical Hazards, 4th Edition

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-1	4,4'-diphenylmethane diisocyanate (MDI)***	Methylene bisphenyl isocyanate (MDI)	Not Available	Not Available	0.02 ppm / 0.2 mg/m3	Not Available
ACGIH Threshold Limit Values (TLVs)	4,4'-diphenylmethane diisocyanate (MDI)***	Methylene bisphenyl isocyanate	.005 ppm	Not Available	0.020 (10-minute) ppm / 0.2 (10-minute) mg/m3	Not Available
Ingredient	Original IDLH		Revised IDLH			
methylenediphenyl diisocyanate (MDI)/ polyol prepolymer	Not Available		Not Available			
4,4'-diphenylmethane diisocyanate (MDI)***	75 mg/m3		Not Available			
2,2'-dimorpholinodiethyl ether	Not Available		Not Available			
1,1-difluoroethane	Not Available		Not Available			

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly.
----------------------------------	--

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

Individual protection measures, such as personal protective equipment	   
Eye and face protection	▶ Safety glasses with side shields ▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.
Skin protection	See Hand protection below
Hands/feet protection	▶ Isocyanate resistant materials include Teflon, Viton, nitrile rubber and some PVA gloves. ▶ Protective gloves and overalls should be worn as specified in the appropriate national standard. ▶ Contaminated garments should be removed promptly and should not be re-used until they have been decontaminated. ▶ NOTE: Natural rubber, neoprene, PVC can be affected by isocyanates ▶ When handling sealed and suitably insulated cylinders wear cloth or leather gloves.
Body protection	See Other protection below
Other protection	▶ Overalls ▶ Eyewash unit ▶ Barrier cream ▶ Skin cleansing cream

Respiratory protection

Wear suitable respiratory protection if the exposure limits are exceeded. Follow OSHA regulations and good industrial hygiene practice.

SECTION 9 Physical and chemical properties**Information on basic physical and chemical properties**

Color	White		
Physical state	Compressed Gas	Relative density (Water = 1)	1.13
Odor	Not Available	Partition coefficient n-octanol / water	Not Available
Odor threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Kinematic Viscosity (cSt)	Not Available
Initial boiling point (°C)	-25	Molecular weight (g/mol)	Not Available
Flash point (°C)	-50	Relative Vapor Density	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	16.9	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	3.9	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	0
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available
Nanoform Solubility	Not Available	Particle Characteristics	Not Available
Particle Size	Not Available		

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

Information on toxicological effects

a) Acute Toxicity	There is sufficient evidence to classify this material as acutely toxic.
b) Skin Irritation/Corrosion	There is sufficient evidence to classify this material as skin corrosive or irritating.
c) Serious Eye Damage/Irritation	There is sufficient evidence to classify this material as eye damaging or irritating
d) Respiratory or Skin sensitisation	There is sufficient evidence to classify this material as sensitising to skin or the respiratory system
e) Mutagenicity	Based on available data, the classification criteria are not met.
f) Carcinogenicity	Based on available data, the classification criteria are not met.
g) Reproductivity	Based on available data, the classification criteria are not met.
h) STOT - Single Exposure	There is sufficient evidence to classify this material as toxic to specific organs through single exposure
i) STOT - Repeated Exposure	There is sufficient evidence to classify this material as toxic to specific organs through repeated exposure
j) Aspiration Hazard	Based on available data, the classification criteria are not met.

Inhaled	Inhalation of non-toxic gases may cause: ► CNS effects: headache, confusion, dizziness, stupor, seizures and coma; ► respiratory: shortness of breath and rapid breathing; ► cardiovascular: collapse and irregular heart beats; ► gastrointestinal: mucous membrane irritation, nausea and vomiting. The vapour/mist may be highly irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis and pulmonary oedema. Possible neurological symptoms arising from isocyanate exposure include headache, insomnia, euphoria, ataxia, anxiety neurosis, depression and paranoia. Gastrointestinal disturbances are characterised by nausea and vomiting. Pulmonary sensitisation may produce asthmatic reactions ranging from minor breathing difficulties to severe allergic attacks; this may occur following a single acute exposure or may develop without warning for several hours after exposure. Sensitized people can react to very low doses, and should not be allowed to work in situations allowing exposure to this material. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.
Ingestion	Considered an unlikely route of entry in commercial/industrial environments The material is not thought to produce adverse health effects following ingestion. Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.
Skin Contact	Causes skin irritation. May cause an allergic skin reaction.
Eye	Causes eye irritation.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Main route of exposure to the gas in the workplace is by inhalation. Persons with a history of asthma or other respiratory problems or are known to be sensitized, should not be engaged in any work involving the handling of isocyanates. Animal testing shows that polymeric MDI can damage the nasal cavities and lungs, causing inflammation and increased cell growth.

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister	TOXICITY	IRRITATION
	Not Available	Not Available
methylenediphenyl diisocyanate (MDI)/ polyol prepolymer	TOXICITY	IRRITATION
	Oral (Rat) LD50: >5000 mg/kg ^[2]	Not Available
4,4'-diphenylmethane diisocyanate (MDI)***	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >6200 mg/kg * ^[2]	Eye (Rodent - rabbit): 100mg - Moderate
	Inhalation (Rat) LC50: 178 mg/m ³ ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (Mouse) LD50: 2200 mg/kg ^[2]	Skin (Rodent - rabbit): 500mg/24H
	Oral (Rat)LD50: 9200 mg/kg ^[2]	Skin: adverse effect observed (irritating) ^[1]
2,2'-dimorpholinodiethyl ether	TOXICITY	IRRITATION
	Oral (Rat) LD50: >2000 mg/kg * ^[2]	Eye: adverse effect observed (irritating) ^[1]
1,1-difluoroethane	TOXICITY	IRRITATION
	Inhalation (Mouse) LC50: 977000 mg/m ³ /2h ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Inhalation (Rat)LC: 64000 ppm/4h ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
	Inhalation (Rat)LCLo: 64000 ppm/4h ^[2]	
	Oral (Rat)LD: >1500 mg/kg ^[2]	
	TOXICITY	IRRITATION
	Oral (Rat)LD50: 484 mg/kg ^[2]	

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Continued...

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

METHYLENEDIPHENYL DIISOCYANATE (MDI)/ POLYOL PREPOLYMER	No significant acute toxicological data identified in literature search. Isocyanate vapours are irritating to the airways and can cause their inflammation, with wheezing, gasping, severe distress, even loss of consciousness and fluid in the lungs. Nervous system symptoms that may occur include headache, sleep disturbance, euphoria, inco-ordination, anxiety, depression and paranoia.		
4,4'-diphenylmethane diisocyanate (MDI)***	Inhalation (human) TClO: 0.13 ppm/30 mins Eye (rabbit): 0.10 mg moderate Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Aromatic and aliphatic diisocyanates may cause airway toxicity and skin sensitization. Monomers and prepolymers exhibit similar respiratory effect. Of the several members of diisocyanates tested on experimental animals by inhalation and oral exposure, some caused cancer while others produced a harmless outcome. This group of compounds has therefore been classified as cancer-causing.		
2,2'-dimorpholinodiethyl ether	No experimental evidence available for genotoxicity in vitro (Ames test negative). *BASF Overexposure to most of these materials may cause adverse health effects. Many amine-based compounds can cause release of histamines, which, in turn, can trigger allergic and other physiological effects, including constriction of the bronchi or asthma and inflammation of the cavity of the nose. Whole-body symptoms include headache, nausea, faintness, anxiety, a decrease in blood pressure, rapid heartbeat, itching, reddening of the skin, urticaria (hives) and swelling of the face, which are usually transient. There are generally four routes of possible or potential exposure: inhalation, skin contact, eye contact, and swallowing. Inhalation: Inhaling vapours may result in moderate to severe irritation of the tissues of the nose and throat and can irritate the lungs. Higher concentrations of certain amines can produce severe respiratory irritation, characterized by discharge from the nose, coughing, difficulty in breathing and chest pain. Chronic exposure via inhalation may cause headache, nausea, vomiting, drowsiness, sore throat, inflammation of the bronchi and lungs, and possible lung damage. Repeated and/or prolonged exposure to some amines may result in liver disorders, jaundice and liver enlargement.		
1,1-difluoroethane	1,1-difluoroethane is practically non-toxic following acute or chronic inhalation exposure. In animal testing, extremely high concentrations (5% and over) may cause reduced contraction of heart muscle and at even higher levels, heartbeat irregularities. It seems to have a weak effect in damaging genetic material in cells. Studies have not shown it to cause developmental or reproductive toxicity, and it has not been shown to cause mutations.		
METHYLENEDIPHENYL DIISOCYANATE (MDI)/ POLYOL PREPOLYMER & 4,4'-diphenylmethane diisocyanate (MDI)*** & 2,2'-dimorpholinodiethyl ether	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important.		
Acute Toxicity	✓	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure	✓
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity					
QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
methylenediphenyl diisocyanate (MDI)/ polyol prepolymer	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
4,4'-diphenylmethane diisocyanate (MDI)***	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	>100mg/l	2
	BCF	672h	Fish	61-150	7
	NOEC(ECx)	504h	Crustacea	>=10mg/l	2
2,2'-dimorpholinodiethyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	>100mg/l	2
	EC50	72h	Algae or other aquatic plants	>100mg/l	2

Continued...

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

	LC50	96h	Fish	>2150mg/l	2
	NOEC(ECx)	48h	Crustacea	100mg/l	2
1,1-difluoroethane	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	146.695mg/l	2
	NOEC(ECx)	504h	Crustacea	0.214mg/l	2
	EC50	96h	Algae or other aquatic plants	47.755mg/l	2
	LC50	96h	Fish	291.31mg/l	2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

for polyisocyanates:
Polyisocyanates are not readily biodegradable. However, due to other elimination mechanisms (hydrolysis, adsorption), long retention times in water are not to be expected. The resulting polyurea is more or less inert and, due to its molecular size, not bioavailable. Within the limits of water solubility, polyisocyanates have a low to moderate toxicity for aquatic organisms.
For Isocyanate Monomers:
Environmental Fate: Isocyanates, (di- and polyfunctional isocyanates), are commonly used to make various polymers, such as polyurethanes. Polyurethanes find significant application in the manufacture of rigid and flexible foams. They are also used in the production of adhesives, elastomers, and coatings.
Atmospheric Fate: These substances are not expected to be removed from the air via precipitation washout or dry deposition.
Terrestrial Fate: These substances are expected to sorb strongly to soil.
DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
4,4'-diphenylmethane diisocyanate (MDI)***	LOW (Half-life = 1 days)	LOW (Half-life = 0.24 days)
2,2'-dimorpholinodiethyl ether	HIGH	HIGH
1,1-difluoroethane	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
4,4'-diphenylmethane diisocyanate (MDI)***	LOW (BCF = 330)
2,2'-dimorpholinodiethyl ether	LOW (LogKOW = -1.3122)
1,1-difluoroethane	LOW (LogKOW = 0.75)

Mobility in soil

Ingredient	Mobility
4,4'-diphenylmethane diisocyanate (MDI)***	LOW (Log KOC = 376200)
2,2'-dimorpholinodiethyl ether	LOW (Log KOC = 10)
1,1-difluoroethane	LOW (Log KOC = 35.04)

Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority. ▶ Evaporate or incinerate residue at an approved site. ▶ Return empty containers to supplier. ▶ Ensure damaged or non-returnable cylinders are gas-free before disposal.
------------------------------	--

SECTION 14 Transport information

Labels Required

	
Marine Pollutant	NO

Shipping container, transport vehicle placarding, and labeling may vary from the below information. This depends on the quantity shipped, the applicability of excepted quantity requirements, limited quantity requirements, and/or special provisions according to US DOT, IATA and IMDG regulations. In case of reshipment, it is the responsibility of the shipper to determine the appropriate labels and markings in accordance with applicable transport regulations.

Land transport (DOT)

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

14.1. UN number or ID number	3501	
14.2. UN proper shipping name	Chemical under pressure, flammable, n.o.s. (contains 1,1-difluoroethane)	
14.3. Transport hazard class(es)	Class	2.1
	Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Hazard Label	2.1
	Special provisions	362, T50, TP40

Air transport (ICAO-IATA / DGR)

14.1. UN number	3501	
14.2. UN proper shipping name	Chemical under pressure, flammable, n.o.s. * (contains 1,1-difluoroethane)	
14.3. Transport hazard class(es)	ICAO/IATA Class	2.1
	ICAO / IATA Subsidiary Hazard	Not Applicable
	ERG Code	10L
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	A1 A187
	Cargo Only Packing Instructions	218
	Cargo Only Maximum Qty / Pack	75 kg
	Passenger and Cargo Packing Instructions	Forbidden
	Passenger and Cargo Maximum Qty / Pack	Forbidden
	Passenger and Cargo Limited Quantity Packing Instructions	Forbidden
	Passenger and Cargo Limited Maximum Qty / Pack	Forbidden

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	3501	
14.2. UN proper shipping name	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (contains 1,1-difluoroethane)	
14.3. Transport hazard class(es)	IMDG Class	2.1
	IMDG Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	F-D , S-U
	Special provisions	274 362
	Limited Quantities	0

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
methylenediphenyl diisocyanate (MDI)/ polyol prepolymer	Not Available
4,4'-diphenylmethane diisocyanate (MDI)***	Not Available
2,2'-dimorpholinodiethyl ether	Not Available
1,1-difluoroethane	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
methylenediphenyl diisocyanate (MDI)/ polyol prepolymer	Not Available
4,4'-diphenylmethane diisocyanate (MDI)***	Not Available
2,2'-dimorpholinodiethyl ether	Not Available

Product name	Ship Type
1,1-difluoroethane	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

methylenediphenyl diisocyanate (MDI)/ polyol prepolymer is found on the following regulatory lists
Not Applicable
4,4'-diphenylmethane diisocyanate (MDI)*** is found on the following regulatory lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants
US - Massachusetts - Right To Know Listed Chemicals
US - New Jersey Right to Know Hazardous Substances
US - Pennsylvania - Hazardous Substance List
US Clean Air Act - Hazardous Air Pollutants
US DOE Temporary Emergency Exposure Limits (TEELs)
US EPA Integrated Risk Information System (IRIS)
US EPCRA Section 313 Chemical List
US New York City Community Right-to-Know: List of Hazardous Substances
US NIOSH Recommended Exposure Limits (RELs)
US OSHA Permissible Exposure Limits (PELs) Table Z-1
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US TSCA New Chemical Exposure Limits (NCEL)
2,2'-dimorpholinodiethyl ether is found on the following regulatory lists
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
1,1-difluoroethane is found on the following regulatory lists
US - Massachusetts - Right To Know Listed Chemicals
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Flammables
US - New Jersey Right to Know Hazardous Substances
US AIHA Workplace Environmental Exposure Levels (WEELs)
US Department of Homeland Security (DHS) - Chemical Facility Anti-Terrorism Standards (CFATS) - Chemicals of Interest
US DOE Temporary Emergency Exposure Limits (TEELs)
US EPA Integrated Risk Information System (IRIS)
US New York City Community Right-to-Know: List of Hazardous Substances
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)

Additional Regulatory Information

Not Applicable

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories	
Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	Yes
Reproductive toxicity	No
Skin Corrosion or Irritation	Yes
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	Yes
Hazards Not Otherwise Classified	No

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Continued...

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
4,4'-diphenylmethane diisocyanate (MDI)***	5000	2270

US. EPCRA Section 313 Toxic Release Inventory (TRI) (40 CFR 372)

This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know-Act of 1986 (40 CFR 372):

CAS No	%[weight]	Name
101-68-8	15-40	4,4'-diphenylmethane diisocyanate (MDI)***

This information must be included in all SDSs that are copied and distributed for this material.

Additional Federal Regulatory Information
Not Applicable

State Regulations

US. California Proposition 65
None Reported

Additional State Regulatory Information
Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Canada - DSL	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Canada - NDSL	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer; 4,4'-diphenylmethane diisocyanate (MDI)***; 2,2'-dimorpholinodiethyl ether; 1,1-difluoroethane)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Japan - ENCS	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Korea - KECI	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
New Zealand - NZIoC	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Philippines - PICCS	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
USA - TSCA	TSCA Inventory 'Active' substance(s) (4,4'-diphenylmethane diisocyanate (MDI)***; 2,2'-dimorpholinodiethyl ether; 1,1-difluoroethane); No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Taiwan - TCSI	Yes
Mexico - INSQ	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer; 2,2'-dimorpholinodiethyl ether)
Vietnam - NCI	Yes
Russia - FBEPH	No (methylenediphenyl diisocyanate (MDI)/ polyol prepolymer)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	04/21/2025
Initial Date	03/23/2022

SDS Version Summary

Version	Date of Update	Sections Updated
3.8	04/21/2025	Hazards identification - Classification

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

- ▶ PC - TWA: Permissible Concentration-Time Weighted Average
- ▶ PC - STEL: Permissible Concentration-Short Term Exposure Limit
- ▶ IARC: International Agency for Research on Cancer
- ▶ ACGIH: American Conference of Governmental Industrial Hygienists
- ▶ STEL: Short Term Exposure Limit
- ▶ TEEL: Temporary Emergency Exposure Limit,
- ▶ IDLH: Immediately Dangerous to Life or Health Concentrations
- ▶ ES: Exposure Standard
- ▶ OSF: Odour Safety Factor
- ▶ NOAEL: No Observed Adverse Effect Level
- ▶ LOAEL: Lowest Observed Adverse Effect Level
- ▶ TLV: Threshold Limit Value
- ▶ LOD: Limit Of Detection
- ▶ OTV: Odour Threshold Value
- ▶ BCF: BioConcentration Factors
- ▶ BEI: Biological Exposure Index

QDEK QD3000 UNO-FOAM 48 Squares Insulation Adhesive Canister

- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code

- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Powered by AuthorITe, from Chemwatch.