

CF 812 WD

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 05/05/2022 Revision date: 05/05/2022 Supersedes: 11/26/2021

Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Trade name	CF 812 WD
Product code	BU Fire Protection Foam

1.2. Recommended use and restrictions on use

Use of the substance/mixture	PU installation foams
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1.3. Supplier

Supplier	Department issuing data specification sheet
Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway Plano, TX 75024 - USA T +1 9724035800 1-800-879-8000 toll free - F +1 918 254 0522	Hilti AG Feldkircherstraße 100 Schaan, 9494 - Liechtenstein T +423 234 2111 chemicals.hse@hilti.com

1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries) +1 918 8723000 1-800-879-8000 toll free
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable aerosols, Category 1	H222 Extremely flammable aerosol.
Skin corrosion/irritation, Category 2	H315 Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319 Causes serious eye irritation.
Respiratory sensitisation, Category 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation, Category 1	H317 May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351 Suspected of causing cancer.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335 May cause respiratory irritation.
Specific target organ toxicity – Repeated exposure, Category 2	H373 May cause damage to organs through prolonged or repeated exposure.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

Danger

Hazard statements (GHS US)

H222 - Extremely flammable aerosol.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.

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Precautionary statements (GHS US)

H319 - Causes serious eye irritation.
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.
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.
P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P280 - Wear protective clothing.
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.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Polymethylenepolyphenylisocyanate, proxylated glycerin polymer	(CAS-No.) 57029-46-6	40 – 50	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
4,4'-diphenylmethanediisocyanate, isomeres and homologues	(CAS-No.) 9016-87-9	20 – 30	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
tris(2-chloro-1-methylethyl) phosphate	(CAS-No.) 13674-84-5	10 – 20	Acute Tox. 4 (Oral), H302
Dimethyl ether	(CAS-No.) 115-10-6	5 – 10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Isobutane	(CAS-No.) 75-28-5	1 – 5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Propane	(CAS-No.) 74-98-6	1 – 5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Butane	(CAS-No.) 106-97-8	0.1 – 1	Flam. Gas 1, H220 Press. Gas (Comp.), H280
diethylene glycol	(CAS-No.) 111-46-6	0.1 – 1	Acute Tox. 4 (Oral), H302

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Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
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. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs:
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	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	Danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	Extremely flammable aerosol.
Explosion hazard	Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	Toxic fumes may be released. Vapours may form explosive mixture with air.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	Equip cleanup crew with proper protection.
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Emergency procedures

Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information

Dispose of materials or solid residues at an authorized site. After curing, the product can be disposed of with household waste.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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. 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 spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. May form flammable/explosive vapour-air mixture. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures

Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

5 – 25 °C

Heat and ignition sources

Keep away from heat and direct sunlight. Keep away from ignition sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
No additional information available	
Dimethyl ether (115-10-6)	
No additional information available	
Isobutane (75-28-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Isobutane
ACGIH OEL STEL [ppm]	1000 ppm
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2022

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Propane (74-98-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Propane
OSHA PEL TWA [1]	1800 mg/m³
OSHA PEL TWA [2]	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Butane (106-97-8)	
No additional information available	
diethylene glycol (111-46-6)	
No additional information available	
Polymethylenepolyphenylisocyanate, proxylated glycerin polymer (57029-46-6)	
No additional information available	
tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
No additional information available	

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

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	0 (< 10 minutes)		
Reusable gloves	Viton® II	2 (> 30 minutes)		

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Not necessary with sufficient ventilation. In case of inadequate ventilation wear respiratory protection.

Device	Filter type	Condition
	Type A - High-boiling (>65 °C) organic compounds	

Personal protective equipment symbol(s):



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Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol.
Colour	Beige
Odour	slight ether-like odour
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	< 17.7 °C compressed gas
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Extremely flammable aerosol.
Vapour pressure	> 100 mm hg (20°C/68°F)
Relative vapour density at 20 °C	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) Not classified

Acute toxicity (dermal) Not classified

Acute toxicity (inhalation) Not classified

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
LD50 oral rat	> 10000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)

Butane (106-97-8)	
LC50 Inhalation - Rat [ppm]	276798.8 ppm

diethylene glycol (111-46-6)	
LD50 oral rat	16500 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral, 5 day(s))
LD50 dermal rabbit	13300 mg/kg bodyweight (Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.6 mg/l air (Other, 4 h, Rat, Weight of evidence, Inhalation (aerosol), 14 day(s))

tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
LD50 oral rat	1101 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitisation 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.

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
IARC group	3 - Not classifiable

Reproductive toxicity Not classified

STOT-single exposure May cause respiratory irritation.

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
STOT-single exposure	May cause respiratory irritation.

Polymethylenepolyphenylisocyanate, proxylated glycerin polymer (57029-46-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Polymethylenepolyphenylisocyanate, proxylated glycerin polymer (57029-46-6)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not classified

Viscosity, kinematic

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Symptoms/effects after inhalation

Danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.

Symptoms/effects after skin contact

Causes skin irritation.

Symptoms/effects after eye contact

Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)
Dimethyl ether (115-10-6)	
LC50 - Fish [1]	> 4100 mg/l (NEN 6504: Water - Determination of toxicity with Poecilia reticulata, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 4400 mg/l (NEN 6501: Water - Determination of toxicity with Daphnia magna, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)
Isobutane (75-28-5)	
LC50 - Fish [1]	27.98 mg/l (ECOSAR v1.00, 96 h, Pisces, Fresh water, QSAR)
diethylene glycol (111-46-6)	
LC50 - Fish [1]	75200 mg/l (96 h, Pimephales promelas, Flow-through system, Experimental value, Lethal)
EC50 - Crustacea [1]	> 10000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
LC50 - Fish [1]	51 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	131 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	82 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
Persistence and degradability	Not readily biodegradable in water.
Dimethyl ether (115-10-6)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
Isobutane (75-28-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water.
Butane (106-97-8)	
Persistence and degradability	Readily biodegradable in water.
diethylene glycol (111-46-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
ThOD	1.51 g O ₂ /g substance
tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

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4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
BCF - Fish [1]	1 (Pisces, Literature study)
Partition coefficient n-octanol/water (Log Pow)	10.46 (Calculated, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Dimethyl ether (115-10-6)	
Partition coefficient n-octanol/water (Log Pow)	0.1 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Isobutane (75-28-5)	
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Propane (74-98-6)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Butane (106-97-8)	
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
diethylene glycol (111-46-6)	
BCF - Fish [1]	100 l/kg (3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.98 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
BCF - Fish [1]	0.8 – 2.8 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Pisces, Flow-through system, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.68 (Experimental value, Equivalent or similar to OECD 117)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	9.078 – 10.597 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.
Dimethyl ether (115-10-6)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).
Isobutane (75-28-5)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).
Propane (74-98-6)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).
Butane (106-97-8)	
Surface tension	No data available in the literature
Ecology - soil	Not applicable (gas).
diethylene glycol (111-46-6)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

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tris(2-chloro-1-methylethyl) phosphate (13674-84-5)

Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.24 (log Koc, OECD 106: Adsorption/Desorption Using a Batch Equilibrium Method, Read-across)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	5F
Special provisions (ADR)	190, 327, 344, 625
Limited quantities (ADR)	1I
Packing instructions (ADR)	P207, LP02

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Mixed packing provisions (ADR) MP9
Transport category (ADR) 2
Tunnel restriction code (ADR) D

Transport by sea

Special provisions (IMDG) 63, 190, 277, 327, 344, 959
Limited quantities (IMDG) SP277
Packing instructions (IMDG) P207, LP02
EmS-No. (Fire) F-D
EmS-No. (Spillage) S-U
Stowage category (IMDG) None
MFAG-No 126

Air transport

PCA packing instructions (IATA) 203
PCA max net quantity (IATA) 75kg
CAO packing instructions (IATA) 203
Special provisions (IATA) A145, A167, A802

Inland waterway transport

Classification code (ADN) 5F
Special provisions (ADN) 19, 327, 344, 625
Limited quantities (ADN) 1 L
Excepted quantities (ADN) E0
Equipment required (ADN) PP, EX, A
Ventilation (ADN) VE01, VE04
Number of blue cones/lights (ADN) 1

Rail transport

Special provisions (RID) 190, 327, 344, 625
Limited quantities (RID) 1L
Packing instructions (RID) P207, LP02

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

4,4'-diphenylmethanediisocyanate, isomeres and homologues	CAS-No. 9016-87-9	20 – 30%
Dimethyl ether	CAS-No. 115-10-6	5 – 10%
Isobutane	CAS-No. 75-28-5	1 – 5%
Propane	CAS-No. 74-98-6	1 – 5%
Butane	CAS-No. 106-97-8	0.1 – 1%
diethylene glycol	CAS-No. 111-46-6	0.1 – 1%
Polymethylenepolyphenylisocyanate, proxylated glycerin polymer	CAS-No. 57029-46-6	40 – 50%
tris(2-chloro-1-methylethyl) phosphate	CAS-No. 13674-84-5	10 – 20%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

4,4'-diphenylmethanediisocyanate, isomeres and homologues	CAS-No. 9016-87-9	20 – 30%
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4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
Polymethylenepolyphenylisocyanate, proxylated glycerin polymer (57029-46-6)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

15.2. International regulations

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Dimethyl ether (115-10-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Isobutane (75-28-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Propane (74-98-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
tris(2-chloro-1-methylethyl) phosphate (13674-84-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date 05/05/2022

Full text of H-statements:

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
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.

Indication of changes:

Section	Changed item	Change	Comments
			new foam cluster

CF 812 WD

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.