



SAFETY DATA SHEET

Thermofix Foam Gun

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name Thermofix Foam Gun

1.2 Relevant identified uses of the substance and uses advise against

Product uses Polyurethane foam adhesive.

1.3 Details of the supplier of the safety data sheet

Company Don Construction Products Bulgaria EAD
152 Prof. Tsvetan Lazarov blvd.
Techno Park Sofia, fl. 3
Sofia 1582
Bulgaria
Tel: +359 2 870 2782
Fax: +359 2 870 2761
info@dcp-int.com

1.4 Emergency telephone number

Emergency telephone ++359 2 870 2782 (available during office hours)
number

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification

Physical hazards

Aerosol 1 - H229, Aerosol 1 - H222.

Health hazards

Acute Tox. 4 - H302/H332, Carc. 2 - H351, Eye Irrit. 2 - H319, Resp. Sens. 1 -H334, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, STOT RE 2 - H373, STOT SE 3 - H335.

Environmental hazards

Not classified.

Classification (67/548/EEC or 1999/45/EC)

T: R48. Xn: R20/R22, R42. F+: R12, Xi: R36/37/38, R43. Carc. Cat 3: R40.

Human health

See section 11 for additional information on health hazards.

Environmental

Not classified.



2.2 Label elements



Hazard pictograms

Signal word(s)

Danger.

Hazard statement

H302/H332	Harmful if swallowed or if inhaled.
H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H351	Suspected of causing cancer.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H335	May cause respiratory irritation.

Precautionary statement

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
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.
P302/P352	IF ON SKIN: Wash with plenty of water.
P304/P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305/P351/P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410/P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501	Dispose of the contents/containers in accordance with the current legislation on waste treatment.

Contains

4,4'-methylenediphenyl diisocyanate, isomers and homologues; Phosphoric trichloride, reaction products with propylene oxide



Supplementary information

2.2: 94/1/EC	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
2.3: 2008/47/EC	Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.
EUH204	Contains isocyanates. May produce an allergic reaction.

Other hazards None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture Mixture composed of polyurethane in solvents.

4,4'-methylenediphenyl diisocyanate, isomers and homologues	30-50%
CAS number: 101-68-8	EC number: 202-966-0
Classification Acute Tox. 4 - H332 Carc. 2 - H351 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT RE 2 - H373 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) Carc. Cat 3: R40 Xi: R36/37/38, R43 Xn: R20, R42, R48
Phosphoric trichloride, reaction products with propylene oxide	10-20%
CAS number: 1244733-77-4	EC number: 911-815-4
Classification Acute Tox. 4 - H302	Classification (67/548/EEC or 1999/45/EC) Xn: R22
Isobutane	5-10%
CAS number: 75-28-5	EC number: 200-857-2
Classification Flam. Gas 1 - H220 Press. Gas - H280	Classification (67/548/EEC or 1999/45/EC) F+: R12
1,1-difluoroethane	5-10%
CAS number: 75-37-6	EC number: 200-866-1
Classification Flam. Gas 1 - H220 Press. Gas - H280	Classification (67/548/EEC or 1999/45/EC) F+: R12



Dimethyl ether	2.5-5%
CAS number: 115-10-6	EC number: 204-065-8
Classification Flam. Gas 1 - H220 Press. Gas - H280	Classification (67/548/EEC or 1999/45/EC) F+: R12
Propane	1-2.5%
CAS number: 74-98-6	EC number: 200-827-9
Classification Flam. Gas 1 - H220 Press. Gas - H280	Classification (67/548/EEC or 1999/45/EC) F+: R12
Butane	0.1-1%
CAS number: 106-97-8	EC number: 203-448-7
Classification Flam. Gas 1 - H220 Press. Gas - H280	Classification (67/548/EEC or 1999/45/EC) F+: R12
2,2'-dimorpholinyl-diethyl ether	0.1-1%
CAS number: 6425-39-4	EC number: 229-194-7
Classification Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) Xi: R36

The Full Text for all R-Phrases and Hazard Statements are Displayed in section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS of this product.

In case of inhalation

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

In case of skin contact

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.



In case of eye contact

Rinse eyes thoroughly with luke warm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the MSDS of the product.

In case of ingestion

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

4.2 Most important symptoms and effects, both acute and delayed

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

Non-applicable.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂).

Unsuitable extinguishing media

IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazard arising from the substance or mixture

Specific hazards

Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide (HCN).

Hazardous combustion products

Contains substances that may result in explosion caused by heat. In case of fire follow the instructions on the Internal Emergency Plan.

5.3 Advice for firefighters

Protective actions during firefighting

No specific firefighting precautions known.

Special protective equipment for firefighters

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)



SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (see section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertizing agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods for containment and cleaning up

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections

For personal protection (see section 8). See section 11 for additional information on health hazards. For waste disposal (see section 13).

SECTION 7: HANDLING AND STORAGE

7.1 Precaution for safe handling

Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (see subsection 6.3).

7.2 Conditions for safe storage, including any incompatibilities

Technical measures for storage

Minimum Temp.: 5°C.

Maximum Temp.: 30°C.



General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information (see subsection 10.5).

7.2 Specific end use(s)

Field of application of the product is described in Technical Data Sheet (TDS).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Phosphoric trichloride, reaction products with propylene oxide

Long-term exposure limit (8-hour TWA):

Dermal: 2.08 mg/kg.

Inhalation: 5.82 mg/m³.

Dimethyl ether

Long-term exposure limit (8-hour TWA):

Inhalation: 1894 mg/m³.

2,2'-dimorpholinyl-diethyl ether

Long-term exposure limit (8-hour TWA):

Dermal: 1 mg/kg.

Inhalation: 7.28 mg/m³.

8.2 Exposure controls

Appropriate engineering controls

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using individual protection equipment they should have the CE marking in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

Personal protection

Always check applicability with your supplier of protective equipment.

Eye/face protection

Wear chemical resistant goggles or visor approved to BS EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Nitrile gloves to BSEN374 are recommended. Break through times can vary depending on thickness, use and source. Change gloves regularly.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.



Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Do not eat, drink or smoke when using this product.

Respiratory protection

Wear filter mask for gases, vapours and particles approved to EN 149 and EN 405.

8.3 Environmental exposure controls

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information (see subsection 7.1).

Volatile organic compounds:

V.O.C. (Supply): 13.23 % weight.

V.O.C. density at 20°C: 154.44 kg/m³ (239,67 g/L).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Aerosil
Appearance	Non-applicable
Colour	Non-applicable
Odour	Non-applicable
Odour threshold	Non-applicable
pH (concentrate)	Non-applicable
Melting point/range (°C)	Non-applicable
Boiling point/range (°C)	Non-applicable
Flash point (°C)	> 60
Ignition temperature (°C)	240
Explosive Properties (%)	Non-applicable
Relative Density (@20°C)	1.167
Water Solubility	Non-applicable
Viscosity, dynamic (@20°C)	Non-applicable
Solvent content – organic content	13.2 %

9.2 Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

1.0 Reactivity

No hazardous reactions are expected if the following technical instructions storage of chemicals (see section 7).



10.2 Chemical stability

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid

Avoid direct sunlight exposure and elevated temperatures.

10.5 Incompatible materials

Combustive materials.

10.6 Hazardous decomposition products

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

Ingestion

- Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

Acute toxicity - oral

LD50 (mg/kg)

632.0

Inhalation

- Acute toxicity: Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of concentration.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

Acute toxicity - Inhalation

LC50 (mg/L)

11.0



Skin corrosion/irritation

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

Acute toxicity - Dermal

LD50 (mg/L)

3038.0

CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

STOT- single exposure

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

STOT- repeated exposure

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of concentration.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Aspiration hazard

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information (see section 3).

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not available. Not measured. Do not allow to enter waterways or drains.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

Mobility.

No data is volatile.

12.5 Results of PBT and vPvB assessment

Non-applicable.



12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATION

General information

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

Disposal methods

Should be disposed of as hazardous waste via a licensed waste operator.

SECTION 14: TRANSPORT INFORMATION

TRANSPORT OF DANGEROUS GOODS BY LAND

With regard to ADR 2013 and RID 2013:

UN number

1950

UN proper shipping name

AEROSOLS, flammable.

Transport hazard class(es)

2



Packing group

Non-applicable.

Dangerous for the environment

No.

Special precautions for user

Special regulations 190, 327, 625

Tunnel restriction code D.

Physico-Chemical properties See section 9

Limited quantities 1 L.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-applicable.



TRANSPORT OF DANGEROUS GOODS BY SEA:
With regard to IMDG 36-12:

UN number

1950

UN proper shipping name

AEROSOLS, flammable.

Transport hazard class(es)

2



Packing group

Non-applicable.

Dangerous for the environment

No.

Special precautions for user

Special regulations Non-applicable.

Tunnel restriction code F-D, S-U.

Physico-Chemical properties See section 9

Limited quantities 1 L.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-applicable.

TRANSPORT OF DANGEROUS GOODS BY AIR:
With regard to IATA/ICAO 2014:

UN number

1950

UN proper shipping name

AEROSOLS, flammable.

Transport hazard class(es)

2





Packing group

Non-applicable.

Dangerous for the environment

No.

Special precautions for user

Special regulations Non-applicable.

Tunnel restriction code Non-applicable.

Physico-Chemical properties See section 9

Limited quantities Non-applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-applicable.

SECTION 15: REGULATORY INFORMATION

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

National regulations

Control of Substances Hazardous to Health Regulations 2002 (as amended).

Guidance

Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Key literature references and sources for data

Health and Safety Executive Guidance Note EH40 (amended annually). Workplace Exposure Limits.

Risk phrases in full

R12	Extremely flammable.
R20	Harmful by inhalation.
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitisation by inhalation and skin contact.
R48	Danger of serious damage to health by prolonged exposure.



Hazard statements in full

Acute Tox. 4 - H302	Harmful if swallowed.
Acute Tox. 4 - H332	Harmful if inhaled.
Carc. 2 - H351	Suspected of causing cancer.
Eye Irrit. 2 - H319	Causes serious eye irritation.
Aerosil 1 - H222	Extremely flammable aerosil.
Aerosil 1 - H229	Pressurized container: May burst if heated
Resp. Sens. 1 - H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Irrit. 2 - H315	Causes skin irritation.
Skin Sens. 1 - H317	May cause an allergic skin reaction.
STOT RE 2 - H373	May cause damage to organs through prolonged or repeated exposure.
STOT SE 3 - H335	May cause respiratory irritation.

SDS status

Approved

SDS number

DCP/11/04

SDS issue date

14.05.18

Issue no.:

01

Rev. no.

00

Revision date

Disclaimer

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