



Safety Data Sheet

According to article 31 and Annex II of the EU REACH Regulation

Selfoam Nozzle PU Foam

0990 Nozzle PU Foam

Version: 01
Rev. Date: 14.03.2014

1. Identification of the substance/preparation and company

1.1. Identification of the substance/preparation:

Product name: Sel Gun Grade PU Foam – 0990 Nozzle Grade PU Foam

1.2. Use of the substance/preparation:

Insulation product in construction applications.

1.3. Company Address:

SEL Dış Ticaret ve Kimya San. A.Ş.
Fevzi Paşa Mahallesi Kınıklı Kavşağı Cad.
E-5 Karayolu Üzeri, No:138 Sel Binası
Değirmenköy/Silivri/İstanbul
Tel: +90 212 735 34 00
Faks: +90 212 735 34 66
E-posta: info@selsil.com.tr

1.4. Telephone Number for emergency:

+90 212 735 34 00

2. Hazard Identification

2.1. Classification of the Mixture

Classification according to Regulation (EC) No 1272/2008

This product is classified as dangerous according to EU Directives- (EC) No. 1272/2008.

Acute toxicity, Inhalative, Category 4 (H332)

Skin irritation, Category 2 (H315)

Eye irritation, Category 2 (H319)

Sensitization of the respiratory airways, Category 1 (H334)

Sensitization of the skin, Category 1 (H317)

Carcinogenicity, Category 2 (H351)

Specific target organ toxicity (single exposure), Category 3 (H335)

Specific target organ toxicity (repeated exposure), Category 2 (H373)

Lact. (H362)

Flam Aerosol, Category 2, (H222)



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Classification according to Directive 1999/45/EC

This product is classified as dangerous according to 67/548/EEC,1999/45/EC

Harmful by inhalation.

May cause sensitization by inhalation and skin contact.

Irritating to eyes, respiratory system and skin.

Limited evidence of a carcinogenic effect.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

May cause harm to breastfed babies.

2.2. Label Elements

Labeling according to Regulation EC No 1272/2008 (CLP)



Contains polymethylene polyphenyl isocyanate, 4,4'-methylenediphenyl diisocyanate

Hazard Statements

- H222: Extremely flammable aerosol.
 H351: Suspected of causing cancer.
 H362: May cause harm to breast-fed children.
 H332: Harmful if inhaled.
 H373: May cause damage to organs through prolonged or repeated exposure if inhaled.
 H319: Causes serious eye irritation.
 H335: May cause respiratory irritation.
 H315: Causes skin irritation.
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H317: May cause an allergic skin reaction.

Precautinary Statements

- P101: If medical advice is needed, have product container or label at hand.
 P102: Keep out of reach of children.
 P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P251: Pressurized container: Do not pierce or burn, even after use.
 P280: Wear protective gloves and eye protection/face protection.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.



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P410 /412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.
P501: Dispose of contents/container to manufacturer/competent authority

Labeling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)



Extremely Flammable



Harmful

Contains polymethylene polyphenyl isocyanate, 4,4'-methylenediphenyl diisocyanate

Risk Phrases

R20: Harmful by inhalation
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
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R64: May cause harm to breastfed babies

Safety Phrases

S23: Do not breathe spray
S36/37: Wear suitable protective clothing and gloves
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S 51: Use only in well-ventilated areas



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3. Composition/Information on Ingredients

According to EU Directives- (EC) No. 1272/2008:

Chemical Name	CAS No.	EINECS/ELINCS No.	REACH Registration Number	Conc.	Classification in Mixture
				(%w/w)	
Polymethylene polyphenyl isocyanate	9016-87-9	-		>25	Carc. 2; H351 Acute Tox. 4; H332 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317
N-butane	106-97-8	203-448-7		<10	Flam, H222
Iso-butane	75-28-5	200-857-2			Flam, H222
Propane	74-98-6	200-827-9			Flam, H222
Dimethyl Ether	115-10-6	204-065-8	01-2119472128-37-0003	<10	Flam, H222
Chloroalkanes C14-17	85535-85-9	287-477-0	17-2119406889-25-0000	<20	H362

*For the full text of the H-Statements mentioned in this Section, see Section 16.

According to EU Directives 67/548/EEC or 1999/45/EC:

Chemical Name	CAS No.	EINECS/ELINCS No.	REACH Registration Number	Conc.	Classification in Mixture
				(%w/w)	
Polymethylene polyphenyl isocyanate	9016-87-9	-		30-50	Carc. Cat. 3; R40 Xn; R20 - 48/20 Xi; R36/37/38 R42/43
N-butane	106-97-8	203-448-7		<10	F+; R12
Iso-butane	75-28-5	200-857-2			Flam, H222
Propane	74-98-6	200-827-9			F+; R12
Dimethyl Ether	115-10-6	204-065-8	01-2119472128-37-0003	<10	F+; R12
Chloroalkanes C14-17	85535-85-9	287-477-0	17-2119406889-25-0000	<20	R64



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4. First Aid Measures

4.1. In case of eye contact:

Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes)

Seek medical advice.

4.2. In case of skin contact:

Wipe off. Wash affected areas with soap and plenty of water.

If irritation persists, seek medical advice.

4.3. If swallowed:

Do not induce the patient to vomit. Rinse mouth.

Give victim two glasses of water.

Never give anything by mouth to an unconscious person.

Seek medical advice.

4.4. If inhaled:

Take the person into the fresh air.

Seek medical advice.

5. Fire-fighting measures

5.1. Special protective equipment/procedures:

A self-contained respirator and protective clothing should be worn.

Mask and chemical resistant personal protective equipment should be used.

Determine the need to evacuate or isolate the area according to your local emergency plan.

5.2. Hazards during fire fighting

On burning may emit toxic fumes.

5.3. Suitable extinguishing media:

Water fog (if unavailable fine water spray), foam, dry chemical or carbon dioxide can be used.

5.4. Unsuitable extinguishing media:

None known.



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6. Accidental Release Measures

6.1. Spill / Leak:

Avoid contact with.
Ventilate the area with fresh air.
Stop the leak if there is no risk.

6.2. Personal precautions:

Use personal protective equipment (protective gloves, work clothes and glasses)
Provide adequate ventilation.
Keep away from sources of ignition.
Smoking is prohibited.

6.3. Methods for cleaning up:

Allow product to solidify and remove it by mechanical means. Take collected spill to manufacturer/competent authority. Clean (treat) contaminated surfaces with acetone. Further disposal by incineration in accordance with local laws in force.

6.4. Environment related measures:

Collect the resulting residue containing solution.
Place in a closed container approved for transportation by appropriate authorities.
Dispose of collected material as soon as possible.

Prevent the spilled material to leak and contact with garbage, canals and sewage
If the product has caused environmental pollution (sewers, waterways, soil or air),
inform the relevant authorities.

7. Handling and Storage

7.1. Usage:

ADVICE ON SAFE HANDLING:

Provide good room ventilation even at ground level (vaporous are heavier than air)
Handle with care-avoid shock, friction and impact.

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION:

Emergency cooling must be provided for the eventuality of a fire in the vicinity.
Keep away from sources of ignition-refrain from smoking.



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7.2. Storage:

REQUIREMENTS FOR STORAGE ROOMS AND VESSELS:

Store in a cool and dry place
Storage Temperature: <50 °C
Keep out of direct sunlight.

ADVICE ON STORAGE COMPALIBILITY:

Do not store together with oxidizing agents.
Do not store with combustibile materials.
Keep away from acids and bases.

FURTHER INFORMATION ON STORAGE CONDITIONS:

Protect from heat / overheating.
Heat causes increase in pressure and risk of bursting.

8. Exposure Controls/Personal Protection

8.1. Control Parameters

Exposure limits of substances in the mixture.

Substance	Ca No:	Basis / Country	Short Time Value	Short Time Value	Time Weighted Average Exposure Limit	Time Weighted Average Exposure Limit
			mg/m ³	ppm-Calculated	mg/m ³ -8 h	ppm-Calculated
Diphenyl methane diisocyanate, isomers and homologues (1)	9016-87-9 / 101-68-8	Germany/ TRGS 900	0,05			
Chloroalkanes C14-17	85535-85-9	Germany/ TRGS 900	0,3	6	2,4	48
N-butane	106-97-8	Denmark	500	1200	1000	2400
		United Kingdom	600	1450	75	1810
		Germany/ TRGS 900	1000	2400		
Iso-Bütan	75-28-5	Belgium	1000			
		Germany/ TRGS 900	1000	2400		
Propane	74-98-6	Belgium	1000			
		Germany/ TRGS 900	1000	1800		
Dimethyl ether	115-10-6	Germany/ TRGS 900	1000	1900		
		European Union	1000	1920		
1	"Polymeric MDI" (PMDI) is a technical grade MDI, containing 30 % - 80 % w/w 4,4'-methylene diphenyl isocyanate (MDI); the remainder consists of MDI oligomers and MDI homologues					



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8.2. Engineering Controls:

Contains Polymethylene polyphenyl isocyanate and propane/butane and DME gases.
Use general dilution ventilation and/or local exhaust ventilation.
If ventilation is not adequate, use respiratory protection equipment.

8.3. Personal Protection Equipment

Eyes: Avoid eye contact. Safety goggles should be worn.

Skin: Avoid skin contact.

Chemical resistant gloves should be worn.

(Recommended: Suitable materials for safety gloves; EN 374-3)

Respiratory: Avoid breathing of vapors.

Respiratory protection should be used.

In case of long-term interactions, fresh air mask should be used.

8.4 Hygiene Measures:

Avoid contact with eyes.

Especially in confined places, make sure you have proper ventilation.

Follow good industrial hygiene and safety practice.

Especially before eating, drinking or smoking, wash hands.

While using the product, do not drink, eat or smoke.

8.5. Environmental exposure controls:

Refer to section 6 and 12.

9. Physical and Chemical Properties:

9.1. Physical Form: Aerosol

9.2. Important Health, Safety and Environmental Information:

Flash Point: no data available (based on propellant)

Decomposition Temperature: no data available

Viscosity: no data available

Explosion Limits: no data available

Water Solubility: Not compatible.

Density: 15+/-2 kg/m³

Vapor Pressure: no data available

Vapor Density: no data available

Evaporation Rate: no data available



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Melting Point:	<i>no data available</i>
Boiling Point:	<i>no data available</i>
Partition Coefficient (n-octanol/water):	<i>no data available</i>
Autoignition Temperature:	<i>no data available</i>

The above information is not intended for use in preparing product specifications.

10. Stability and Reactivity

10.1. Chemical Stability:
*Stable under normal usage conditions.
Unstable on exposure to heat.*

10.2. Incompatible Substances:
Unknown.

10.3. Dangerous Reactions:
The risk of explosion.

10.4. Conditions to Avoid:
*Keep away from ignition sources, acids and bases.
Containers may explode at temperatures above 50 °C*

11. Toxicological Information

11.1. Information about Toxicological Effects:
No data available for the mixture.



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11.1.1. Acute Toxicity

Acute Toxicity								
Substance	Cas No	Exposure Type	Parameter	Method	Value	Exposure Time	Species	Value Determination
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	Oral	LD50		>2000 mg/kg		rat	Toxicological studies of a comparable product.
		Inhalation (aerosol)	LD50		490 mg/m ³	4 h		Literature/Supplier
Chloro alkenes C14-17	85535-85-9	Oral	LD50		>4000 mg/kg		rat	Literature/Supplier
N-butane	106-97-8	Inhalation	LC50		658 mg/l	4h	rat	Literature/Supplier
Isobutane	75-28-5	Inhalation	LC50		658 mg/l	4h	rat	Literature/Supplier
Propane	74-98-6	Inhalation	LC50		658 mg/l	4h	rat	Literature/Supplier
Dimethyl Ether	115-10-6	Inhalation	LC50		309018 mg/l		rat	Test- Haskell Laboratories

May cause allergic respiratory response.

MDI concentrations above the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest.

Occasionally, breathing difficulties may be life threatening.

11.1.2. Corrosion/ Irritation

Corrosion / Irritation							
Substance	Cas No	Exposure Type	Result	Method	Exposure Time	Species	Value Determination
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	Skin	irritating	OECD /404		rabbit	Toxicological studies of a comparable product.
Chloro alkenes C14-17	85535-85-9	Eye	slightly irritating				Supplier

May cause eye and skin irritation.



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11.1.3. Sensitization

Sensitization							
Substance	Cas No	Exposure Type	Result	Method	Exposure Time	Species	Value Determination
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	skin / inhalation	sensitizing	OECD /404		rabbit	Toxicological studies of a comparable product.
Chloro alkenes C14-17	85535-85-9		Not-Sensitizing			Guinea Pigs	Supplier

Repeated contact can cause allergic reactions.

11.1.4. Genotoxicity (in vivo)

Genotoxicity (in vivo)							
Substance	Cas No	Result	Method	Exposure Time	Species	Organ	Value Determination
Chloro alkenes C14-17	85535-85-9	not mutagenic					Ames Test

Contains no known mutagenetic chemicals

11.5. Other Information:

Chronic Toxicity:

Over-exposure entails the risk of concentration-dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations, including concentrations below the UK Workplace Exposure Limit (WEL). Prolonged contact with the skin may cause tanning and irritant effects.

Reproductive Toxicity:

This product does not contain any known or suspected reproductive hazards.

Target Organ Effects:

Contains component(s) that have been reported to have specific target organ effects.



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12. Ecological Information

12.1. Toxicity

No test data is available on the mixture.

Substance	Cas No:	Method	Parameter	Result	Duration	Species	Value Source
				mg/l	h		
Diphenyl methane diisocyanate, isomers and homologues (1)	9016-87-9 / 101-68-8	OECD/209	EC50	>100	3	Activated Sludge/bacterial	Literature/Supplier
		OECD/202	EC50	>1000	24	Daphnia Magna /Water Flea	Literature/Supplier
		OECD/203	LC50	>1000	96	Danio Rerio / Zebra Fish	Literature/Supplier
Chlorinated Paraffin	85535-85-9		EC50	>2000	3	Activated Sludge/bacterial	Literature/Supplier
			LC50	>5000	96	Alburnus	Literature/Supplier
Dimethyl ether	115-10-6		LC50	>4000	96	Fish	Literature/Supplier
			EC 50	>4000	48	Daphnia Magna	Literature/Supplier

12.2. Persistence and Degradability

Persistence and Degradability					
Substance	Cas No:	Method	Result	Duration	Value Source
			%	Day	
Diphenyl methane diisocyanate, isomers and homologues (1)	9016-87-9 / 101-68-8	OECD/302C	0	28	Literature/Supplier

Contains no biodegradable products



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12.3. Bioaccumulation

Bioaccumulation						
Substance	Ca No:	Parameter	Result	Duration	Species	Value Source
Chlorinated Paraffin	85535-85-9	BCF	1000			Literature/ Supplier

Contains no bioaccumulative substances

12.4. Movement and Partitioning:

In the aquatic environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

13. Disposal Considerations:

13.1. Product Disposal:

Dispose of in accordance with local regulations.

13.2. Packing Disposal:

Dispose of in accordance with local regulations.

14. Transport Information:

14.1. Road /Rail (ADR/RID):

ADR/RID Class: 2
UN Number: UN 1950
Division/Group: 5 A
Definition: Aerosol

14.2. Sea Transport (IMDG):

IMDG Class: 2
UN Number: UN 1950
Division/Group: 5 A
EmS: 2-13
MFAG: 620(1998 edit)
Marine pollutant: no
Definition: Aerosol



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14.3. Air Transport (IATA):

IATA /ICA Class: 2
UN Number: UN 1950
Division/Group: 5 A
Definition: Aerosol

15. Regulatory Information:

15.1. National Legislation/Regulations:

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

16. Other Information

16.1. Information Sources:

This SDS is prepared based on the information received from the suppliers.

16.2. Full text of R-phrases referred to under sections 2 and 3

R20: Harmful by inhalation
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
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R64: May cause harm to breastfed babies

16.3. Full text of H phrases referred to under sections 2 and 3

H222: Extremely flammable aerosol.
H351: Suspected of causing cancer.
H362: May cause harm to breast-fed children.
H332: Harmful if inhaled.
H373: May cause damage to organs through prolonged or repeated exposure if inhaled.
H319: Causes serious eye irritation.
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16.4. Additional Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS.

As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary –even for the same product – between different countries, reflecting the different compliance requirements.