

MATERIAL SAFETY DATA SHEET MSDS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

PRODUCT NAME SOLUTION	: 404 POLYURETHANE FOAM ULTRAMAX PROFESSIONAL
COMPANY NAME	: 404 Kimya San. ve Tic. A.Ş.
	Headquarters: Merkez Mahallesi Akçe Sokak Güzle İş Merkezi No:3 Kat:1 Şile Yolu Shell Benzin İstasyonu Yanı Çekmeköy/ İSTANBUL Factory: Organize San. Böl. 102 Ada 7 Parsel Selimiye Köyü OSMANELİ/ BİLECİK Headquarters Tel: 0216 642 92 71 Fax: 0216 642 92 75 Factory Tel: 0228 470 00 14

2. HAZARDS IDENTIFICATION

NFPA	WHMIS Classification	Transport Symbol	Personal Protective
(USA)	(Canada)		Equipment
	Not Controlled	Not Regulated for Transportation	

2.1.1 Risk Phrases :

R 12: Extremely flammable.

R 20: Harmful if inhaled.

R 22: Harmful if swallowed.

R 36 / 37 / 38: Irritating to eyes, respiratory system and skin.

R 42 / 43: May cause sensitization by inhalation and skin contact.

2.1.2 Safety Phrases :

S 1/2: Keep locked up and out of the reach of children.

S 23: Do not breathe gas/fumes/vapour/spray

S 36/37: Wear suitable protective clothing and gloves.

S 46: If swallowed, seek medical advice immediately and show this container or label.

2.2 Other phrases: Security warning, caution flammable gas! Storage temperature should not exceed 500 °C since containers are pressurized. Foam shows the properties of a strong adhesive, so it will adhere to skin and other surfaces.

2.3 The effects of exposure to excess amount :

Eye contact: May irritate eyes. Contact with foam may lead physical damage due to its adhesive property. **Skin contact :** Causes local irritation, redness and swellings.

Inhalation: Vapors can irritate the nose and may damage upper respiratory tract.

Digestion: May cause irritation in the mouth and digestive system, in the mucous membranes.

3. INFORMATION ABOUT THE COMPOSITION/INGREDIENTS

Definition: A mixture containing non-hazardous additives and the ingredients specified here below.

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Diphenylmethanedi isocyanate isomeres homologues	9016-87-9	Not Available	25-35%	Xn; R 20-36/37/38- 42/43
Butane	106-97-8	203-448-7	2.5-10%	F+; R12
Dimethyl ether	115-10-6	200-662-2	2.5-10%	F+; R12
Propane	74-98-6	200-827-9	2.5-10%	F+; R12



4. FIRST AID

4.1 Inhalation : Move the patient to fresh air if respiratory distress occurs and keep the patient calm. Seek medical assistance.

4.2 Skin Contact : Foam should be removed with the help of a cloth and the clothings contaminated should be removed. Non-cured foam can be removed off the clothing with the help of a light solvent such as acetone. If irritation persists, use a moisturizing cream. Seek medical attention if symptoms continues.
4.3 Eye contact : Wash eyes with plenty of water for more than 15 minutes, and seek medical advice.

4.4 If swallowed : If swallowed, seek medical advice immediately and show this container or label. If swallowed: Do not induce vomiting. If victim vomits when lying on his/her back, then establish treatment position.

5. FIRE FIGHTING MEASURES

5.1 Suitable Extinguishing Media: Use carbon dioxide, dry chemical foam, water spray

(interaction with water causes formation of carbon dioxide) for large fires.

5.2 Fire fighting material and tools to be avoided due to safety: No special provisions.

5.3 Special hazards, might be caused by product, and materials or gases formed after its combustion: Vapors are heavier than air and therefore they can move on surface due to reasons such as ventilation and flame up by ignition sources in places far away from use area.

5.4 Required protective equipment for firefighters: Face mask or respiratory mask for a safe inhalation and personal protective equipment resistant against chemicals.

5.5 Other measures: Includes gases which can create explosive mixtures in the air, and is combustible and condensing. Cured foam is in organic nature, and flames up where heat, oxygen and ignition sources are available.

6 . ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Use protective gloves, work clothing and goggles. Adequate ventilation should be provided. Keep away from sources of ignition.

Smoking is prohibited.

6.2.2. Environmental Precautions: Dispose of empty containers as pressure vessels. Prevent spilled material from dissemination, flowing, contact with garbage, channels and sewage.

6.2.2. Methods and materials for containment and cleaning up: Uncured foam is very sticky and thus contaminating foam should be immediately removed with the help of a cloth or solvents like acetone. Once foam is cured, it can only be removed mechanically. Vegetable oil can be used to remove it off skin (when product is not yet cured).

7. HANDLING AND STORAGE

7.1 Usage Use in accordance with regulation on flammable and combustible liquids. Provide good ventilation. Put the product in pressurized containers. Do not burn the product container. Wear appropriate personal protective equipment (see: Section 8). Eating, drinking and smoking should be prohibited where materials are transferred, stored, and processed. Workers must wash their hands before eating, drinking, or smoking. The people who has sufferings of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any kind of business where this product is used. Avoid skin and eye contact, or do not contaminate clothes. Do not inhale vapor or mist. Do not inhale the gas. Use only with adequate ventilation. Wear appropriate mask where ventilation is inadequate.

7.2 Storage: Store away from oxidizer, plastic, aluminum, and store away from light metal as it is the case for flammable liquids. Heat and fume detectors should be installed in storage room. Provide good ventilation on surface. Ideal storage temperature is 15-26 °C. Do note expose unused products to frost. From the date of manufacture, it can be stored under appropriate conditions.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Information on system and facility design: No special provisions.

5.1 Components with specific control parameters: Dangerous interaction during evaporation of the product at 20 °C is very small or none.

9016-87-9 diphenylmethanediisocyanate, isomers and homologues

MEL : Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

106-97-8 butane

OES : Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm

74-98-6 propane

OES : Asphyxiate

115-10-6 dimethyl ether

OES : Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm IOELV

8.3 Personal Protection :

8.3.1 Respiratory Protection: Respirators must be use in poorly ventilated areas. Fresh air respirators should be used in long-term interaction.

8.3.2. Hand Protection: If necessitated by a risk assessment, water and airtight gloves resistant against chemicals, compatible with an approved standard, should be worn always when working with chemical products. Recommended: Butyl rubber/nitrile rubber gloves.

8.3.3. Eye Protection: Safety goggles compatible with an approved standard should be used in case of any risk in order to avoid exposure to splash of liquids, mists, gases and dusts.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General Information

Form: Liquid in pressure vessel Color: Light Yellow Odor: Characteristic Flash Point: Closed container! 0 °C Density at 20 °C: 19±2 Kg/ cm3 Vapor Pressure: 5 Bar / +20 ° C Self ignition: Product does not feature self-ignition. pH: Not applicable Viscosity, dynamics: Not applicable Solubility in water: Not Miscible or mixable with water. Reacts with water.

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid. Stable under normal storage conditions. Avoid temperatures above 50 °C. Keep away from heat, flame, and sparks.

10.2 Materials to avoid: Highly reactive with active hydrogen-containing substances having water content.
10.3 Hazardous decomposition products : There are no known hazardous decomposition products
10.4 Other Information: No special provisions.

11. POISONING INFORMATION

11.1 Toxicity Methylenediphenyl	iphenyl LD50 (rat): 4,300 mg/kg		
diisocyanate			
Propane	LC50 (rat): 57000 ppm Exposure time: 15 Minutes		
Dimethyl ether	LC50 (rat): 163991 ppm Exposure time: 4 h		

Ingestion: Irritating to mouth, throat and stomach.

Skin contact : Prolonged and repeated skin contact may cause allergic reactions.

Eye contact : Irritating to eyes.

Other informations: Inhalation of vapors may irritate mucous membrane in respiratory system, cause coughing, respiratory distress and headache. High amounts can cause asphyxia. Totally cured foam (at least 24 hours) is not toxic or irritant.

12. ECOLOGICAL INFORMATION

12.1 General Information

Water hazard class 3 (German Regulation) Self-assessment): Excessive amounts are hazardous for water. Do not allow even small amounts mixing in groundwater, water and sewage.

12.2 Accumulation and degradability in nature and water: Cannot be biologically or chemically degradable. No potential of accumulation.

Fish toxicity: No application

Bacteria toxicity: Not applicable

Ecotoxicity (in water): Not applicable

Other informations: Not applicable

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Not applicable

13.2 Proper disposal Not applicable

13.3 Information on controlled disposal: Move filled containers to hazardous waste disposal facilities.

Dispose cured foam as if disposing plastic waste.

13.4 Disposal in nature: Not applicable

14. TRANSPORT INFORMATION

Transport by road/rail (ADR/RID):

Labels : 2.1

Proper shipping name: Aerosol Flammable

Maritime transport (IMDG)

IMDG Class: 2.1 UN number : 1950 Labels : 2.1 Marine pollutant: no



EMS number: F-D,S-U

Proper shipping name: Aerosol Flammable Airfreight (IATA) ICAO/IATA Class : 2.1 UN/ID number: 1950 Label : 2.1 Packaging Description: 203



Proper shipping name: Aerosol Yanıcı

15. REGULATORY INFORMATION

15.1 Definition and classification according to the European Legislation and Regulation on Hazardous Chemicals: **Hazard Signs: F + :** Extremely flammable Xn : Harmful Ingredient: Diphenylmethane diisocyanate isomers and propane / isobutane homologues 15.2 Risk phrases: R 12: Extremely flammable. R 20: Harmful if inhaled. R 22: Harmful if swallowed. R 36 / 37 / 38: Irritating to eyes, respiratory system and skin. R 42 / 43: May cause sensitization by inhalation and skin contact. 15.3 Risk phrases: S 1/2: Keep locked up and out of the reach of children. S 23: Do not breathe gas/fumes/vapour/spray. S 36/37: Wear suitable protective clothing and gloves. S 46: If swallowed, seek medical advice immediately and show this container or label. 15.4 Additional Warning Phrases: Contains cyanate. Please refer to the information given by the manufacturer. Pressurized container. Protect from sunlight and do not expose to temperatures above 50 ° c. Do not pierce or burn, even after use. Do not spray over naked flame or materials in incandescent form. Keep away from sources of ignition - do not smoke. Keep out of reach of children. **VOC:** 15%

16. OTHER INFORMATION

Currently valid information and existing EC directives and national laws are based on regarding Product Safety Information. Users instructions are beyond our knowledge and control. This product cannot be used for a different purpose without our written permission. Complying with regional law and following them all the time, fulfill the requirements are under responsibility of the user. This Material Safety Document describes requirements for safety of product, it does not cover product features. It has been prepared in parallel with the provisions related to Safety Datasheet Forms of REACH regulation, 1907/2006/EC.