Safety Data Sheet

1. Identification of the substance / preparation and the Company

1.1 Identification of the substance or preparation

Code:	411 00 19250-5885P
Product name	HYGRO-FOAM RE1180

1.2 Use of the substance / preparation

Intended use	Hygrosetting polyurethane foam

1.3 Company identification

Name	MECCANOCAR ITALIA S.R.L.
Full address	Via San Francesco,22
District and Country	56033 Capannoli (PI) Italy Tel. +390587609433 Fax +390587607145
e-mail address of the competent person responsible for the Safety Data Sheet	moreno.meini@meccanocar.it

1.4 Emergency telephone

For urgent inquiries refer to	+390587609433

2. Hazards Identification

2.1 Substance/Preparation Classification

This product is dangerous under 67/548/EEC and 1999/45/EC directives and subsequent amendments. Therefore, this product requires a safety data sheet according to the Regulation (EC) 1907/2006 and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Danger Symbols:	F+-Xn
R phrases:	12-20/22-36/37/38-40-42/43-48/20

2.2 Danger Identification

Because of its chemical-physical features, this product is graded as highly flammable (flash-point below 0 °C and boiling point / boiling start equal to 35° C or lower).
HARMFUL BY INHALATION AND IF SWALLOWED.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
LIMITED EVIDENCE OF A CARCINOGENIC EFFECT.
MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.
HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
This product contains isocyanates.
Producer's specifications are as follows:
Ready-to-use products containing isocyanates may irritate mucosas, particularly those of the respiratory system, and may give rise to hypersensitivity reactions. Vapour or aerosol inhalation may lead to sensitization.
Please take all the measures used for all solvent-containing products while manipulating isocyanate-containing products. Avoid vapour and aerosol inhalation.
People with allergic or asthmatic precedents or subject to respiratory disorders should not handle products containing isocyanates.

3. Composition / Information on ingredients

Contains:

Name	Concentration % (C)	Classification
TRIS(2-CHLOROISOPROPYL)PHOSPHATE CAS No 13674-84-5 CE No 237-158-7	18 <= C < 19,5	Xn R22 Xi R36/38
DIPHENYLMETHANE-4,4'-DIISOCYANATE CAS No 101-68-8 CE No 202-966-0 Index No 615-005-00-9	28,5 <= C < 30	Xn R20 Xn R42/43 Xi R36/37/38 Note C 2
GAS DI PETROLIO LIQUEFATTO, ADDOLCITO, GAS DI PETROLIO CAS No 68476-86-8 CE No 270-705-8	7 <= C < 8	F+ R12 T R45 T R46

The complete text of -R- phrases is specified in section 16.

4. First aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.
SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.
INHALATION: Remove to open air. If breathing is irregular, seek medical advice.
INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

5. Fire-fighting measures

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Excess pressure may form in containers exposed to fire at a risk of explosion. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water and the remains of the fire according to applicable regulations.
SUITABLE EXTINGUISHING MEDIA
The extinction equipment should contain carbon dioxide, foam or chemical powders. For product leaks and spills that have not caught fire, nebulised water can be used to dispel flammable fumes and protect the individuals taking part in stemming the leak.
EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Hardhat with visor, fireproof clothing (fireproof jacket and trousers with ties around arms, legs and waist) work gloves (fireproof, cut proof and dielectric), self-respirator (self-protector).

6. Accidental release measures

PERSONAL PRECAUTIONS
Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet.
ENVIRONMENTAL PRECAUTIONS
The product must not penetrate the sewers, surface water, ground water and neighbouring areas.
METHODS FOR CLEANING UP
Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

7. Handling and storage

Avoid bunching of electrostatic charges. Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50 °C, far from any combustion sources. Do not smoke. Do not spray on flames or sparks.
Vapours may catch fire and an explosion may occur; vapours accumulation is therefore to be avoided by leaving windows and doors open and ensuring a good ventilation (draught).
Without adequate ventilation, vapours may accumulate on the floor (low layers) and catch fire even at a distance, if ignited, with the danger of backfire.

8. Exposure control / personal protection.

8.1 Exposure limit values

Name	Type	Country	TWA/8h		STEL/15min	
			mg/m3	ppm	mg/m3	ppm
DIPHENYLMETHANE-4,4'-DIISOCYANATE						
	TLV-ACGIH		0,051	0,005		
	OEL	IRL	0,02		0,07	
	WEL	UK	0,02		0,07	

8.2 Exposure controls
As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.
HAND PROTECTION
Protect hands with category III (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVA, butyl, fluoroelastomer or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.
EYE PROTECTION
Wear hood visor or protective visor together with airtight goggles (ref. standard EN 166)
SKIN PROTECTION
Wear category III professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.
RESPIRATORY PROTECTION
If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear an FFP3 (ref. standard EN 141) type half mask.

The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.
If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).
An emergency eye washing and shower system must be provided.
The product must be used in a closed cycle, in well-aired environments fitted with strong localised aspiration systems (capture speed > 1.5 m/s), otherwise it is compulsory to use the personal protection equipment indicated and always in well-aired environments fitted with strong localised aspiration systems (capture speed > 1.5 m/s).
In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

9. Physical and chemical properties

Colour	grey
Odour	characteristic
Appearance	aerosol
Solubility	insoluble in water
Viscosity	Not available
Vapour density	Not available
Evaporation Rate	Not available
Reactive Properties	Not available
Partition coefficient: n-octanol/water	Not available
pH	Not available
Boiling point	<35°C
Flash point	<0°C
Explosive properties	Not available
Vapour pressure	4,5mmHg
Specific gravity	1,000Kg/l

10. Stability and reactivity

Thermal decomposition and combustion release carbon monoxides and other toxic gases and vapours. The product may react exothermically on contact with strong oxidizing agents or reducers, strong acids or bases.

Above 150 °C, trichloropropylphosphate may give off toxic fumes of HCl, phosphorous oxides and chlorinated hydrocarbons; store in the original containers at temperatures not exceeding 50 °C.
4,4'-diphenylmethane diisocyanate: with water it develops carbon dioxide and forms an indissoluble solid polymer. Hence, humid material, that has eventually been recovered, must be stored in open containers.

11. Toxicological information

Acute effects: inhalation and ingestion of this product are harmful. This product may irritate mucosas, the upper respiratory tract, eyes and skin. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.
In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema. Ingestion of even small amounts of this product may cause serious health disorders (stomach pain, nausea, sickness, diarrhoea).
This product must be handled carefully because of its possible carcinogenic effects. Anyway, currently available data do not allow us to comprehensively assess this product.
Inhalation of this product causes sensitization, which may give rise to a series of inflammatory episodes, most of all characterized by obstruction and affecting the respiratory system. Sometimes, sensitization phenomena arise together with evident rhinitis and asthma. Damages to the respiratory system depend on the inhaled quantity, on the product concentration in the working environment and on the exposure time. Contact with skin causes

sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurves, ulcerations and exudative phenomena, whose intensity varies according to the illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.
This product may cause functional disorders or morphological mutations after repeated or prolonged exposure by inhalation of a quantity of 0.25 mg/l/6h/day or lower.

4,4'-diphenylmethane diisocyanate: risk of sensitization even at concentrations lower than TLV in case of spray working.

12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil, sewers and waterways. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.
Please take all the proper measures to reduce harmful effects on aquifers.

13. Disposal consideration

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.
These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class:	2
UN:	1950
Label:	2.1
Limited Quantity	2
Tunnel restriction code	D
Proper Shipping Name:	AEROSOLS

Carriage by sea (shipping):

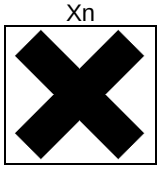
IMO Class:	2.1
UN:	1950
Label:	2.1
EMS:	F-D, S-U
Marine Pollutant	NO
Proper Shipping Name:	AEROSOLS

Transport by air:

IATA:	2
UN:	1950
Label:	2.1
Proper Shipping Name:	AEROSOLS

15. Regulatory information

Xn



HARMFUL

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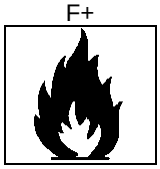

EXTREMELY FLAMMABLE

R12	EXTREMELY FLAMMABLE.
R20/22	HARMFUL BY INHALATION AND IF SWALLOWED.
R36/37/38	IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
R40	LIMITED EVIDENCE OF A CARCINOGENIC EFFECT.
R42/43	MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.
R48/20	HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
S 2	KEEP OUT OF THE REACH OF CHILDREN.
S18	HANDLE AND OPEN CONTAINER WITH CARE.
S23	DO NOT BREATHE GAS/VAPOUR/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).
S51	USE ONLY IN WELL-VENTILATED AREAS.
S63	IN CASE OF ACCIDENT BY INHALATION: REMOVE CASUALTY TO FRESH AIR AND KEEP AT REST.

Contains isocyanates. See information supplied by the manufacturer.

Contains:
DIPHENYLMETHANE-4,4'-DIISOCYANATE

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on bright flame or any incandescent material.
Keep away from sources of ignition – No smoking
Keep out of the reach of the children

Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

16. Other information

Text of (R) phrases quoted in section 3 of the sheet.

R12	EXTREMELY FLAMMABLE.
R20	HARMFUL BY INHALATION.
R22	HARMFUL IF SWALLOWED.
R36/37/38	IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
R36/38	IRRITATING TO EYES AND SKIN.
R42/43	MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.
R45	MAY CAUSE CANCER.
R46	MAY CAUSE HERITABLE GENETIC DAMAGE.

GENERAL BIBLIOGRAPHY
1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);

3. Regulation (EC) 1272/2008 (CLP) of the European Parliament;
4. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
5. The Merck Index. - 10th Edition;
6. Handling Chemical Safety;
7. Niosh - Registry of Toxic Effects of Chemical Substances;
8. INRS - Fiche Toxicologique (toxicological sheet);
9. Patty - Industrial Hygiene and Toxicology;
10. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition;

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.