SDS SHEET

[In accordance with the regulation no 1907/2006 (Reach) and 453/210]

SECTION 1 Identification

Product identifier	Hydro-Prufe 9112 MMA Primer
Other means of identification	Not determined
Recommended use:	Coating
Manufacturer:	Hydro-Gard, LLC
Address:	18340 Yorba Linda Blvd, Suite 107, Box 304, Yorba Linda, CA 92886
Telephone / Fax	562/944-7030 / Fax: 562/944-6402
Email competent person	saras@hydro-gard.com
Further information provided by	Sara Sears, 562/944-7030
Incident Spill, Leak, Fire, Exposure, or Accident	CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887 CCM825652

SECTION 2 Hazard (s) Identification

Classification of substance or mixture	Classification according to 1272/2008/EC -Flammable Liquid 2 H225, Skin Irritant 2 H315, Skin Sensitive 1 H317, Eye Irritant 2 H319, STOT SE 3 H335. Causes skin irritation.
Physical Hazards	Highly flammable liquid and vapor.
Health Hazards	May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.
Environmental hazards	Not classified
Label elements	
Signal Word	Danger
Product Identifier	Methyl Methacrylate

Hazard Statements:

H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces - No Smoking
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P3052	IN ON SKIN: Wash with plenty of soap and water

P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Other hazards:	The components of this mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

SECTION 3 Composition / Information on Ingredients

Substances: Not applicable

Mixtures: Chemical characterization: Mixtures, methyl methacrylate resin.

Dangerous ingredients:

Chemical name	Classification acc to 1272/2008/	Identifier Codes	%
Methyl methacrylate	EC: Flam. Liquid Skin Irritant. 2H315, Skin Sens. 1 H317, STOT SE 3 H335	CAS: 80-62-6 EINECS: 201-297-1 Index Number: 607-035-00-6 Reach number: 01-2119452498-28-XXXX	25-50%
N.N-Di-(2hydroxyethyl)-p-toluidin	WE: Acut Tox. 4 H302, skin irrit 2 H315, Eye Dam 1 H318	CAS: 3077-12-1 EINECS:221-359-1 Index Number: Reach Reg number: -	<2.5%
Naphtha (ErdOl), Hydrodesulfuriert, schwer	WE: Flam. Liq. 3 H226, Asp. Tox. 1H304, STOT SE 3 H336, Aquatic Chronic 2 H411	CAS: 64742-82-1 EINECS:265-185-4 Index Number: 649-330-00-2 Reach Reg number: -	<1%

1) The substance with Community workplace exposure limits.
Full text of each relevant R and H phrase is given in section 16 of SDS

SECTION 4 First - Aid Measures

General Information:	Take off contaminated clothing immediately. Move the victim to fresh air.
Inhalation:	Consult a doctor if disturbing symptoms appear. Move the victim to fresh air. Keep victim warm and calm.
Skin Contact:	Wash the contaminated skin thoroughly with plenty of water. Consult a doctor if disturbing symptoms appear.
Eye contact:	Protect the non-irritated eye, remove contact lenses. Wash the contaminated eye with plenty of water for several minutes. Avoid powerful water stream-risk of cornea damage. Consult a doctor if disturbing symptoms appear.
Ingestion:	Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor immediately, show the container or label.
Most important symptoms and effects, both acute and delayed	The product may trigger sensitisation of the skin and respiratory tract. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of the symptoms.
Indication of any immediate medical attention and special treatment needed:	Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

SECTION 5 Fire - Fighting Measures

Extinguishing media	
Suitable extinguishing media:	CO_2, sand, extinguishing powder. Do not use water.
Unsuitable extinguishing media:	Water jet - risk of the propagation of the flame.
Special hazards arising from the substance or mixture	During fire, the product may produce toxic fumes of carbon oxides, nitric oxides. Do not inhale combustion products, they can be dangerous for human health.
Advice for fire fighters	Highly flammable liquid and vapor. High temperature may trigger polymerisation. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Use personal protective measures. Ensure adequate ventilation. Avoid skin and eyes contamination. Do not breathe vapors. Keep away from sources of ignition.
Environmental precautions	Do not allow product to reach sewage system, water bodies or ground/soil. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.
Methods and material for containment and cleaning up	Collect with liquid absorbing materials (e.g. soil, sand, silica, universal binding agent, vermiculite, etc.) and place it in labeled containers. Do not flush with water or aqueous cleaning agents. Collect in a suitable container. Treat the collected material as waste. Clean the contaminated place and ventilate it.
Reference to other sections:	Appropriate conduct with waste product - Section 13. Personal protective equipment - see Section 8.

SECTION 7 Handling and Storage

Precautions for safe handling	Handle in accordance with good occupational hygiene and safety practices. Avoid contact with skin and eyes. Do not breathe vapors. Before break and after work wash hands. Use only in accordance with the identified purpose. Keep away from ignition sources. Do not eat, drinnk or smoke when using this product. Protect against electrostatic charges. Use only non-sparking tools. Ensure good interior ventilation, especially at floor level.
Conditions for safe storage, including any incompatibilities	Keep in a dry, cool and well-ventilated area. Keep away from high temperatures and direct sunlight. Temperature recommended for storage: 41 ^{O}F - 77 ^{O}F (5 - 25 ^{O}C). Keep containers tightly sealed. Store only outside or in explosion proof rooms.
Specific and use (s)	No information about other use than those mentioned in Section 1

SECTION 8 Exposure Controls / Personal Protection

Control Parameters — Components with Community workplace exposure limits:

Metyl methacrylate (50-100%)	CAS 80-62-6	Limit value - Eight hours	50 ppm
Metyl methacrylate (50-100%)	CAS 80-62-6	Limit value - Short term	100 ppm
Legal basis: Commission Directive 2006/15/EC Please check any national occupational exposure limit values in your country			

DNEL and PNEC for methyl methacrylate (CAS 80-62-6)

DNEL	ORAL	INHALATION	DERMAL
Workers, long-term, local effects	1	210 mg/m^3	1,5 mg/cm^3
Workers, long-term, systemic effects	1	210 mg/m^3	13,67mg/kg KG/day
Workers, acute, local effects	1	[2]	1,5 mg/cm^3
Workers, acute, systemic effects	1	[2]	-
Consumers, long-term, local effects	1	105 mg/m^3	1,5 mg/cm^3
Consumers, long-term, systemic effects	1	74,3 mg/m^3	8,2mg/kg KG/Tag
Consumers acute, local effects	1	[2]	1,5 mg/cm^3
Consumers, acute, systemic effects	1	[2]	

1) low oral toxicity: DNEL not calcualted
2) Long-term DNEL

Comment	PNEC
PNEC Freshwater	0,94 mg/l
PNEC Seawater	0,094 mg/l
PNEC Sediment	5,74 mg/kg
PNEC Soil	1,47 mg/kg

Exposure Controls	Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Keep away from foodstuffs, beverages and food. Take off contaminated clothing immediately. Avoid contact with skin and eyes. Protective clothing should be stored separately.
Hand protection 	Only use chemical-protective gloves with CE-labeling of category III: Nitrile rubber, Butyl rubber. Recommended thickness of material: >/= 0,5 mm The section of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, th resistance of the glove material can not be calculated in advance and has therefore to be check prior to the application. www.gisbau.de/service/epoxi/expotab.html
Eye protection 	Use tightly fitting protective glasses
Respiratory protection 	Recommended filter device for short term use; Combination filter A-P2

Body Protection	Protective clothing necessary Applied personal protective equipment must comply with requirements of the Directive 89/686/EC. The employer is obliged to provide protective equipment relevant to performed activities and in accordance with all quality requirements, including its maintenance and cleaning.
Environmental exposure controls	Do not allow large quantities of the product to contaminate ground water, canalization, sewages or soil.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State:	Liquid
Color:	Blue
Odor	Characteristic
Odor threshold	Not determined
pH:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	212 ^{O}F (100^{O}C)
Flash point:	50^{O} F (10^{O}C) (MMA, DIN 51755)
Ignition Temperature:	806^{O}F (430^{O}C)
Evaporation Rate:	Not Determined
Flammability (solid, gas)	Not Applicable
Upper/Lower Flammability or Explosive Limits	12,5 Vol %/0,8 Vol.%
Vapor Pressure (68^{O}F (20^{O}C))	38,7 hPa
Vapor Density	Not Determined
Density (68^{O}F (20^{O}C))	1 g/cm^{3}
Solubility (ies)(water)	max 16 g/l
Solubility(ies): (organic solvents)	Soluble in many organic solvents
Partition Coefficient: n-octanol/water:	Not Determined
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	Not Determined
Explosive Properties:	Product is not explosive. However, formation of explosive sir/steam mixtures is possible
Oxidising Properties:	Not Determined
Viscosity:dynamic (73.4^{O}F (23^{O}C))	800-120 mPas (Brookfield Spindel 63,12 U/min)
Other Information:	VOC 0,01%

SECTION 10 Stability and Reactivity

Reactivity	High temperature may trigger polymerisation.
Chemical stability	The product is stable under normal conditions of use and storage.
Possibility of hazardous reactions	Violent reactions with strong alkalis and oxidizing agents. Reacts with amines.
Condition to avoid	Avoid heat sources and direct exposure to sunlight.
Incompatible materials	Acids, strong oxidizing agents
Hazardous decomposition products	In the event of fire: toxic gases and vapors, inflammable gases/vapors

SECTION 11 Toxicological Information

Information on toxicological effects

Acute toxicity:

Methylmethacrylat, CAS 80-62-6			
Oral	LD_{50}	>5000 mg/kg	(rat)
Dermal	LD_{50} DNEL (Langzeit)	>5000 mg/kg 74,3 mg/m^3	(rab)
Inhalativ	LD_{50} DNEL (Langzeit)	29,8 mg/l/4h 210 mg/m^3	(rat)
N,N-Bix-(2-hydroxypropyl)-ptouluidin, CAS 938668-48-3			
Oral	LD_{50}	100 mg/kg	(rat)

Toxicity of the product:

Acute Toxicity	ATEmix (oral) >2000 mg/kg. Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation
Respiratory or skin Sensitisation	May cause an allergic skin reaction
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	May cause respiratory irritation
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration Danger	Based on available data, the classification criteria are not met.

SECTION 12 Ecological Information (non-mandatory)

Toxicity

Aquatic toxicity:

Methylmethacrylat, CAS 80-62-6

Algae toxicity	EC_{50} >110 MG/1/72h	Selenastrum capricornutum, (OECD 201)
Bacterial toxicity	EC_3 100 mg/l/16h	Pseudomonas putida
Daphnia toxicity	EC_{50} 69 mg/l/48h NOEC 37mg/l	Daphnia magna, (OECD 202) Daphnia magna, (OECD 202 Part 2, 21d)
Fish toxicity	LC_{50} > 79 mg/l/96h NOEC 9,4 mg/l	Onchorhynchus mykiss, (OECD 203) Danio rerio, (OECD 210 fish early life stage test)
BSB5	0,14 g/g	

N, N-Bis-(2-hydroxypropyl)-p-toluidin, CAS 38668-48-3		
Daphnia toxicity	EC50 28.8 mg/l	Daphnia magna
Fish toxicity	LC_{50} 17 mg/l	Danio rerio
BSB5	11 mg O_2 / g	

Persistence and degradability	Easily biodegradable
Bioaccumulative potential	Low bioaccumulative potential
Mobility in soil	No further relevant information available
Results of PBT and vPvB assessment	Not applicable
Other adverse effects	No further relevant information available.

SECTION 13 Disposal Consideration (non-mandatory)

Waste treatment methods	Disposal methods for the product: disposal in accordance with the local legislation. Store residues in original containers.
Disposal methods for used packing:	Reuse/recycle/liquidate empty containers in accordance with the legislation in force. Only containers completely empty can be recycled.
	Legal basis: Directive 2008/98/EC, 94/92/EC
European Waste catalogue:	
08 00 00	Wastes FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 02 00	wastes from MFSU of other coatings (including ceramic materials
08 02 99	wastes not otherwise specified

SECTION 14 Transport Information (non-mandatory)

UN Number	
ADR, IMDG, IATA	1866
UN proper shipping name	
ADR	RESIN SOLUTION
IMDG, IATA	RESIN SOLUTION
Transport hazard class(es)	
ADR	3 (F1) Flammable liquids
IMDG, IATA	3 Flammable liquids

Packing Group	II
Environmental Hazards	Marine Pollutant: No
Special Precautions for User	Kemier-Number: 33 EMS-Number: F-E,S-E
Transport Bulk	According to Annex II of MARPOL 73/78 and the IBC Code - Not applicable
	Transport/Additional information: ADR
	Limited quantities (LQ): 5 L
	Transport category: 2
	Tunnel restriction code: D/E
	UN “Model Regulations”: UN1866,RESUB SOLUTION, 3, III

SECTION 15 Regulatory Information (non-mandatory)

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorizat6ion and Restriction of Chemicals (REACH), establishing a Eurpoean Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.
Council Directive 67/548/ECC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.
Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations.
Commission Regulation (EC No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures.
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).
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Chemical safety assessment A Chemical Safety Assessment is not required for mixtures

SECTION 16 Other Information, Including date of preparation or last revision

This data is based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed or enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and toxic substance
vPvB	Very Persistent, very Bioaccumulative substance
ADR	Accord to europeen sur le transport des marchandises dangeroses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Rail)
IMDG	International Maritime Code fro Dangerous Goods
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
GefStoffV	Ordinance on Hazardous Substances, Germany
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
Other Data	Classification was based on data on hazardous substances calculaiton method under the guidance of Regulation 1272/200//EC (CLP).

The information and recommendations provided in this Safety Data Sheet are presented in good faith and believed to be correct as of the date hereof. The manufacturer makes no representations as to the completeness or accuracy thereof. Information supplied upon the condition that the persons receiving said information will make their own determination as to its suitability for their particular purpose prior to use. In no event will the manufacturer be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representation or warranties, either expressed or implied. Including the merchantability or fitness for a particular purpose are made herein with information contained herein is deemed to be reliable, conservative and accurate. Hydro-Gard, LLC reserves the right to change the design, specification or any other features at any time, without notice, while otherwise maintaining regulatory compliance.

End of Safety Data Sheet