SAFETY DATA SHEET

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 2.1 Print Date 18/04/2017 **Creation Date** 02/02/2015 Revision Date 11/06/2016

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

1.1. Product identifier

Product Name PM MEGA CRYL (PART B) Product Code EP_0956P2G M2 (CLP)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use

Adhesive.

1.3. Details of the supplier of the safety data sheet

NCH (UK) Ltd NCH House Springvale Avenue Bilston WV14 0QL Tel: 01902 510200

NCH Ireland Ltd. The Brewery Business Park, Ardee Road Dundalk, County Louth, Tel: 042 9395500

E-mail address technical uk@nch.com Website address www.ncheurope.com

1.4. Emergency telephone number

01902 510331 (available during Office Hours)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Flammable liquid: Category 2 Skin corrosion: Category 1B Skin sensitisation: Category 1 STOT- single exposure: Category 3 H225 - Highly flammable liquid and vapour

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction H335 - May cause respiratory irritation

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains METHYL METHACRYLATE 2-HYDROXYETHYL METHACRYLATE METHACRYLIC ACID

Hazard pictograms



Signal word DANGER **Hazard Statements**

H225 - Highly flammable liquid and vapour

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

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Precautionary Statements

P363 - Wash contaminated clothing before reuse

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P260 - Do not breathe vapors.

P280 - Wear protective gloves/protective clothing/eye protection.

For industrial and institutional use only.

Keep out of reach of children.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Component	CAS-No.	EC No.	EU - REACH reg number	Weight percent	Classificatio n	EU - GHS/CLP Classificatio n	Notes
METHYL METHACRYLATE	80-62-6	201-297-1	01-21194524 98-28	50 - 100	F; R11 Xi; R37/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Flam. Liq. 2 (H225)	-
2-HYDROXYETHYL METHACRYLATE	868-77-9	212-782-2	01-21194901 69-29	10 - < 20	Xi; R36/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	-
METHACRYLIC ACID	79-41-4	201-204-4	-	5 - < 10	Xn; R21/22 C; R35	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1A (H314)	-

For any H statements and R phrases mentioned in this section, see the full text in section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Do not breathe vapours or spray mist. Do not get in eyes, on skin or on clothing.

Eve Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. Skin Contact

Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops. Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur. Show the Label to the Doctor.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

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4.2. Most important symptoms and effects, both acute and delayed

Sensitisation

May cause sensitisation by skin contact.

Eye contact

May cause burns which could lead to permanent eye damage.

Skin contact

May cause burns on prolonged or repeated exposure.

Ingestion

May cause gastrointestinal irritation seen as nausea, vomiting and diarrhoea.

Inhalation

Inhalation may result in irritation or burns to the respiratory tract.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician

May cause burns of eyes, skin and mucous membranes.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use:. Water spray. Foam. Carbon dioxide (CO2). Dry chemical.

5.2. Special hazards arising from the substance or mixture

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide. Acrylate monomers.

Material can create slippery conditions.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions. Remove all sources of ignition.

6.2. Environmental precautions

Avoid release of neat product into surface water and sanitary sewage system.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Training: Due to the hazardous nature of this product, training in its use is recommended. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation.

Anyone with a history of skin sensitization to any of the substances in this product, should refrain from handling.

7.2. Conditions for safe storage, including any incompatibilities

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Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Keep containers in cool areas out of direct sunlight and away from combustibles. Keep away from open flames, hot surfaces and sources of ignition. Incompatible with strong bases and oxidising agents.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Component	European Union	The United Kingdom	France	Germany	Austria
METHYL METHACRYLATE		STEL: 100 ppm STEL: 416 mg/m ³ TWA: 50 ppm TWA: 208 mg/m ³	TWA: 50 ppm TWA: 205 mg/m³ STEL: 100 ppm STEL: 410 mg/m³	AGW: 50ppm AGW: 210mg/m³ Peak: 100ppm Peak: 420mg/m³ TWA: 50ppm TWA: 210mg/m³	STEL: 100 ppm STEL: 420 mg/m³ TWA: 50 ppm TWA: 210 mg/m³
METHACRYLIC ACID		STEL: 40 ppm STEL: 143 mg/m ³ TWA: 20 ppm TWA: 72 mg/m ³	TWA: 20 ppm TWA: 70 mg/m³	Peak: 10ppm Peak: 36mg/m³ TWA: 5ppm TWA: 18mg/m³	TWA: 20 ppm TWA: 70 mg/m³

Component	Spain	Portugal	Italy	The Netherlands	Switzerland
METHYL METHACRYLATE	STEL: 100 ppm	STEL: 100 ppm	TWA: 50 ppm	STEL: 410 mg/m ³	STEL: 100 ppm
	TWA: 50 ppm	TWA: 50 ppm	STEL: 100 ppm	TWA: 205 mg/m ³	STEL: 420 mg/m ³
					TWA: 50 ppm
					TWA: 210 mg/m ³
METHACRYLIC ACID	TWA: 20 ppm	TWA: 20 ppm			STEL: 10 ppm
	TWA: 72 mg/m ³				STEL: 36 mg/m ³
					TWA: 5 ppm
					TWA: 18 mg/m ³

Component	Denmark	Finland	Norway	Sweden	Czech
METHYL METHACRYLATE	TWA: 25 ppm TWA: 102 mg/m³ Skin	TWA: 10 ppm TWA: 42 mg/m³ STEL: 50 ppm STEL: 210 mg/m³	TWA: 25 ppm TWA: 100 mg/m³ Skin	50 ppm 200 mg/m³ 150 ppm 600 mg/m³	PEL: 50mg/m ³ NPK-P: 150mg/m ³
2-HYDROXYETHYL METHACRYLATE			TWA: 2 ppm TWA: 11 mg/m ³		
METHACRYLIC ACID	TWA: 20 ppm TWA: 70 mg/m ³	TWA: 20 ppm TWA: 71 mg/m³	TWA: 20 ppm TWA: 70 mg/m ³	20 ppm 70 mg/m³ 30 ppm 100 mg/m³	

Component	Poland	Ireland
METHYL METHACRYLATE		TWA: 50 ppm
	NDS: 100 mg/m ³	STEL: 100 ppm
METHACRYLIC ACID		TWA: 20 ppm
		TWA: 70 mg/m ³
		STEL: 40 ppm
		STEL: 140 mg/m ³

8.2. Exposure controls

Control parametres

Provide an eyewash station. Provide washing facilities. Anyone with a history of skin sensitization to any of the substances in this product, should refrain from handling.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

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Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 141 (organic vapours).

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested: Nitrile rubber (0.4 mm). Butyl rubber (0.7 mm). Polyvinyl alcohol. Solvent-resistant gloves (butyl-rubber). Fluorinated rubber. Breakthrough time of the glove material (protective index 6, breakthrough time: >480 min). For break through times, refer to glove manufacturers recommendations.

Skin Protection

Body protection must be chosen based on activity and possible exposure, e.g. footwear (solid shoes, rubber boots), rubber apron, long-sleeved work clothing, impervious suit.

Eye Protection

Safety glasses with side-shields. Approved to EN 166. For large volumes, faceshields should be used.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

Environmental exposure controls

Prevent product from entering drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

AppearanceGreen PinkSpecific Gravity1.15

Physical State Paste Solubility Insoluble in water

Odour Acrylic Autoignition Temperature Viscous No information available.

PH Not applicable. Viscosity Viscous

Melting Point/Range No information available. Explosive properties No information available

Boiling Point/Range101 °COxidizing PropertiesNo information available.Flash Point15 °CVOC Content (%)50.0 %MethodClosed cup

Evaporation Rate
Flammability Limits in Air %
Vapour Pressure
Vapor Density
No information available.
No information available.
No information available.
No information available.

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Avoid radical-forming starting agents, peroxides and reactive metals. Light and/or alkaline metals. Strong bases. Reacts violently with peroxides.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Keep away from open flames, hot surfaces, and sources of ignition. Keep away from combustable material.

10.5. Incompatible materials

Reducing agents. Oxidising agents. Acids. Bases. Heavy metals. Avoid radical-forming starting agents, peroxides and reactive metals.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide. Acrylate monomers.

SECTION 11. TOXICOLOGICAL INFORMATION

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11.1. Information on toxicological effects

Product Information

The product itself has not been tested.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL METHACRYLATE	= 7900 mg/kg (Rat)		= 4632 ppm (Rat) 4 h
2-HYDROXYETHYL METHACRYLATE	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
METHACRYLIC ACID	= 1060 mg/kg (Rat)	500 - 1000 mg/kg (Rabbit)	= 7.1 mg/L (Rat) 4 h

Sensitisation

May cause sensitisation by skin contact.

Skin contact

May cause burns on prolonged or repeated exposure.

Inhalation

Inhalation may result in irritation or burns to the respiratory tract.

Ingestion

May cause gastrointestinal irritation seen as nausea, vomiting and diarrhoea.

Eye contact

May cause burns which could lead to permanent eye damage.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Component Toxicity to Fish		Water Flea	Toxicity to Algae
METHYL METHACRYLATE	LC50 243 - 275 mg/L Pimephales promelas 96 h LC50 125.5 - 190.7 mg/L Pimephales promelas 96 h LC50 170 - 206 mg/L Lepomis macrochirus 96 h LC50 153.9 - 341.8 mg/L Lepomis macrochirus 96 h LC50 > 79 mg/L Oncorhynchus mykiss 96 h LC50 326.4 - 426.9 mg/L Poecilia reticulata 96 h	69: 48 h Daphnia magna mg/L EC50	EC50 = 170 mg/L Pseudokirchneriella subcapitata 96 h
2-HYDROXYETHYL METHACRYLATE	LC50 213 - 242 mg/L Pimephales promelas 96 h LC50 = 227 mg/L Pimephales promelas 96 h		

12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Not likely to bioaccumulate. Component information below.

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Component	log Pow		
METHYL METHACRYLATE	0.7		

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2-HYDROXYETHYL METHACRYLATE	0.47
METHACRYLIC ACID	0.93

12.4. Mobility in soil

The product is insoluble and sinks in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty remaining contents. Recycle according to official regulations.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

16 03 05* organic wastes containing dangerous substances

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDĠ/IMÓ

UN-No UN2920

Proper Shipping Name Corrosive liquid, flammable, n.o.s.

Hazard Class 8
Subsidiary Hazard Class 3
Packing Group || |

Hazard Class 8 + 3
Packing Group II
Classification Code CF1
Limited Quantity 1 L
Transport Cat. (Tunnel 2 (D/E)

Restriction Code)

IATA/ICAO

UN-No UN2920

Proper Shipping Name Corrosive liquid, flammable, n.o.s

Hazard Class 8
Subsidiary Hazard Class 3
Packing Group II
ERG Code 8F

Shipping Description UN2920, Corrosive liquid, flammable, n.o.s, 8 (3), PG II

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

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SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

Other regulatory information

Packaging <125ml.

15.2. Chemical safety assessment

No safety assessment has been created

SECTION 16. OTHER INFORMATION

Text of H statements mentioned in Section 3

H225 - Highly flammable liquid and vapour. H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H314 - Causes severe skin burns and eye damage. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

Text of R phrases mentioned in Section 3

R11 - Highly flammable. R35 - Causes severe burns. R43 - May cause sensitisation by skin contact. R21/22 - Harmful in contact with skin and if swallowed. R36/38 - Irritating to eyes and skin. R37/38 - Irritating to respiratory system and skin.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]. On the basis of test data. H225 - Highly flammable liquid and vapour. Calculation method. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.

Prepared By Austen Pimm Creation Date 02/02/2015 Revision Date 11/06/2016

Revision Summary

Replaces SDS reference EP_0956P2G M1 SDS sections updated 2 6 9 14 16 15

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Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the

international carriage of dangerous goods by road) IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet