

# SAFETY DATA SHEET ACCORDING TO (EC) REGULATION NO. 1907/2006

MSDS-group1-rev10 - EN 07/2015

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY/MANUFACTURER

1.1 Product identification

D560 QUICK STEEL REPAIR AND RETAIN ADHESIVE Contains: Hydroxyethyl / propyl methacrylate

1.2 Relevant uses identified for the substance or mixture and recommended uses

ANAEROBIC ADHESIVE, SEALANT, BLOCKING AGENT

Type of product: ESTER METHACRYLATE BASED ADHESIVE Does not contain substances listed in RoHS and WEEE

1.3 Information on the safety data sheet supplier

**Delta Adhesives Limited** 

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1.4 Emergency telephone number

++44 (0)1226 381571 (Office Hours Only)

SECTION 2: IDENTIFICATION OF HAZARDS

2.1 Classification of substance or mixture

Classification pursuant to 1272/2008 (CLP) Skin Irrit 2; H315 Causes Skin Irritation

Skin Sens. 1; H317 - May cause an allergic skin reaction.

Eye Irrit. 2; H319 Causes severe eye irritation.

STOT SE 3: H335 May cause irritation to respiratory airways.

Classification according to Directive 67/548 / EEC or 1999/45 / EC Xi - Irritant R36/37/38 Irritating to eyes, respiratory system and skin.

**CAUTION** 

Sensitization: R43 May cause sensitization by skin contact

## 2.2 Label elements Label elements (CLP)



Warning

Indication of hazard H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes severe eye irritation.
H335 May irritate the respiratory tract.

Precautionary advice P102 Keep out of the reach of children.

P261 Avoid breathing vapours.

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

P302+P352 If on skin: wash with plenty of soap and water.

P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if they can

easily be removed. Continue rinsing.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
P403+P233 Keep the container tightly closed in a well-ventilated place.

Label elements (DPD 1999/45 / EC)



Warning	IRRITANT	
R-phrases	R 36/37/38	Irritating to eyes, respiratory system and skin.
	R 43	May cause sensitization by skin contact
S phrases	S 2	Keep out of the reach of children.
	S 24/25	Avoid eye and skin contact.
	S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S 28	After contact with skin, wash immediately with plenty of soap and water.
	S 37/39	Wear suitable gloves and eye / face protection.
	S 51	Use only in well ventilated areas.

Special labelling

Text for labelling:

Contains acid methacrylic, monoester with propane1.2-diol, methacrylate 2-hydroxyethyl and 1-acetyl-2-phenylhydrazine.

## 2.3 Other hazards

The product is not hazardous when used in accordance with the recommendations of use.

# SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Classification of the substance or mixture

Not applicable

## 3.2 Mixtures

Chemical characterization: Adhesives based on hydroxyethyl methacrylate / hydroxypropyl acrylate

## **Hazardous Ingredients**

Ingredient	Designation	Contents	Classification DPD / CLP
EINECS 248-666-3 CAS 27813-02-1	Hydroxypropyl acrylate	20 - 40 %	EU: Xi; R36. Sens.; R43. CLP: Eye Irrit. 2; H319.
			Skin Sens. 1; H317.
EINECS 212-782-2	2-Hydroxyethyl Methacrylate	5 - 10 %	EU: Sens.; R43. Xi; R36/38.
CAS 868-77-9			CLP: Skin Irrit. 2; H315.
			Eye Irrit. 2; H319. Skin Sens. 1; H317.
REACH	Cumene hydroperoxide	< 1 %	EU: O; R7. T; R23. C; R34.
01-2119475796-19-xxxx			N; R51-53. Xn; R21/22.
EINECS 201-254-7			Xn; R48/20/22.
CAS 80-15-9			CLP: Org. Perox. EF; H242.
			Acute Tox. 4; H302.
			Acute Tox. 4; H312.
			Acute Tox. 3; H331.
			Skin Corr. 1A; H314.
			STOT RE 2; H373.
			Aquatic Chronic 2; H411.
EINECS 204-055-3	1-Acetyl-2-phenylhydrazine	<0.1 %	EU: Xn; R21. Xn; R68/22.
CAS 114-83-0			Sens.; R43.
			CLP: Acute Tox. 4; H312.
			Skin Sens. 1; H317.
			STOT SE 2; H371.

## **Concentration Limits:**

		Result
Cumene hydroperoxide	Skin Irrit. 2; H315: 3% ≤ C < 10%	Out of range Concentration < 1 %
CAS 80-15-9	Eye Irrit. 2; H319: 1% ≤ C < 3%	
	STOT SE 3; H335: C < 10%	
	Eye Dam. 1; H318: 3% ≤ C < 10%	
	Skin Corr. 1B; H314: C ≥ 10%	
2-Hydroxyethyl Methacrylate	Old Classification	1% ≤ C < 20% - Xi – R43
CAS 868-77-9	1% ≤ C < 20% - Xi – R43	

For the full text of the R and H phrases see section 16 (More info)

#### **SECTION 4: FIRST AID MEASURES**

- 4.1 Description of first aid measures
- 4.1 Inhalation: Accompany the person/s concerned in the open air Respiratory difficulties: consult a doctor.
- 4.2 Contact with skin: Wash with soap and water. Wash immediately with plenty of soap and water.

If skin becomes irritated consult a physician.

- 4.3 Contact with eyes: Rinse open eyes immediately for 10 to 15 minutes, rinse with running water. Subsequently consult an eye doctor.
- 4.4 Ingestion: Rinse mouth, ingest 2-3 glasses of water and seek medical advice. Do NOT induce vomiting.

#### 4.2. Major symptoms and effects, both acute and delayed

EYES: Irritation, conjunctivitis.

SKIN: Redness, hives, rash, irritation.

RESPIRATORY: Irritation, coughing, wheezing, tightness in the chest.

## 4.3 Indication of the need for immediate medical attention and special treatment

See section: Description of first aid measures

## **SECTION 5: FIRE-PREVENTION MEASURES**

5.1 Suitable extinguishing agents

Water spray, carbon dioxide, dry chemical powder, foam

## 5.2 Special dangers arising from the substance or mixture

The following may arise in case of fire: smoke, sulphur oxides, nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

#### 5.3 Recommendations for fire-fighters

Special protective equipment for fire-fighters: Use an auto-respirator. Wear suitable protective clothing.

Additional information: Prevent extinguishing water from flowing into surface and groundwater.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with skin and eyes. Do not inhale vapours.

- 6.2 Environmental precautions Prevent penetration in soil, waterways or sewage systems.
- 6.3 Containment and clean-up methods and materials Absorb the liquid with absorbent materials (sand, sawdust, soil, acid binders, universal binder), and place in closed containers for disposal. Hazardous waste. The contaminated area must be cleaned with soap and water. Clean the floor and all contaminated objects.

Additional information: High risk of slipping due to spillage / product capsizes.

## 6.4 Reference to other sections Refer to sections 8 and 13

#### **SECTION 7: HANDLING AND STORAGE**

7.1 Precautions for safe handling

Information for safe handling:

Ensure proper ventilation of storage and work areas.

Ensure cleanliness in the workplace.

Avoid contact with skin and eyes.

Use automated application systems.

## 7.2 Safe storage conditions, including incompatibilities

Requirements for storage and containers:

Keep container tightly closed and dry. Protect from moisture. Keep only in the original container.

Do not fill return product in the original container. Storage temperature: <25°C Storage advice: Do not store with oxidizing agents.

Storage class: 10 = Combustible liquids not in LGK 3 7.3 Specific end uses No information available.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits - Valid for Italy

Ingredient (Regulated substance)	ppm	mg/m3	Value type	Short term exposure limit category / Remarks	Regulatory List
Cumene hydroperoxide CAS 80-15-9	50	250	Short Term Exposure	Indicative	ECTLV
Cumene hydroperoxide CAS 80-15-9	20	100	average value (8 hours)	Indicative	ECTLV
Cumene hydroperoxide CAS 80-15-9	20	100	average value (8 hours)		OEL (IT)
Cumene hydroperoxide			Skin designation:	Can be absorbed	OEL (IT)

CAS 80-15-9				through the skin.	
Cumene hydroperoxide	50	250	Short Term Exposure		OEL (IT)
CAS 80-15-9					

#### Predicted No-Effect Concentration (PNEC)

Name on List	Environmental	Exposure	ure Value				Remarks
	Compartment	Period	mg/l	ppm	mg/Kg	other	
Hydroxypropyl acrylate CAS 27813-02-1	Fresh Water		0,904				
Hydroxypropyl acrylate CAS 27813-02-1	Marine Water		0,904				
Hydroxypropyl acrylate CAS 27813-02-1	STP		10,00				
Hydroxypropyl acrylate CAS 27813-02-1	Water - intermittent releases		0,972				
Hydroxypropyl acrylate CAS 27813-02-1	Sediment Fresh Water				6,28		
Hydroxypropyl acrylate CAS 27813-02-1	Sediment Marine Water				6,28		
Hydroxypropyl acrylate CAS 27813-02-1	Soil				0,727		

## Derived No-Effect Level (DNEL)

Name on List	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Hydroxypropyl acrylate CAS 27813-02-1	Workers	Dermal	Long term exposure - systemic effects		4,2 mg/kg bw/day	
Hydroxypropyl acrylate CAS 27813-02-1	Workers	Inhalation	Long term exposure - systemic effects		14,7 mg/m3	
Hydroxypropyl acrylate CAS 27813-02-1	General Population	Dermal	Long term exposure - systemic effects		2,5 mg/kg bw/day	
Hydroxypropyl acrylate CAS 27813-02-1	General Population	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	
Hydroxypropyl acrylate CAS 27813-02-1	General Population	Oral	Long term exposure - systemic effects		2,5 mg/kg bw/day	

#### 8.2 Limitation and exposure control Use only in well-ventilated areas.

Limitation and exposure control in the workplace. Respiratory protection: Respiratory protection is required in case of vapours, . Use a type A filter according to EN 14387.

Hand protection: Protective gloves against chemical agents EN 374, in nitrile rubber (according to EN 754). Replace worn or contaminated gloves. Minimum thickness of gloves 0.7 mm Tightly sealed safety glasses according to EN 166: Eye Protection Body Protection: Wear suitable protective clothing.

Health and safety measures: Remove all contaminated clothing immediately.

Avoid inhalation of vapours/spray. Avoid contact with skin and eyes. Preventive skin protection.

Do not eat or drink in the workplace.

Wash hands before breaks and at end of work shifts.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

To enable the adoption of proper control measures, provide all relevant information on the substance or preparation, particularly the information listed in paragraph 9.2. The information in this section should correspond to that which is provided upon registration, where required.

9.1. General information Appearance: Liquid / Paste

Colour: Grey

Odour: Characteristic

pH: NOT APPLICABLE / AVAILABLE

Boiling point / boiling range: NOT APPLICABLE / AVAILABLE

Flash point: NOT APPLICABLE / AVAILABLE

Flammability (solid/gas): NOT APPLICABLE / AVAILABLE Explosive properties: NOT APPLICABLE / AVAILABLE Oxidizing properties: NOT APPLICABLE / AVAILABLE Vapour pressure: NOT APPLICABLE / AVAILABLE Relative density: NOT APPLICABLE / AVAILABLE

Solubility: Immiscible with water

Solubility in water: NOT SOLUBLE IN WATER

Partition coefficient n-octanol/water NOT APPLICABLE / AVAILABLE

Viscosity: 15 - 300.000 mPa.s (20 rpm at 20°C)

Specific gravity (g/ml): 1.02 / 1.06

Vapour density: NOT APPLICABLE / AVAILABLE Evaporation rate: NOT APPLICABLE / AVAILABLE 9.2. Further Information: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: See Section 10.3

#### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

## 10.4 Conditions to be avoided

Keep away from heat.

#### 10.5 Incompatible materials

Oxidizing agents, strong reducing agents, acids

10.6 Hazardous decomposition products

If heated or in case of fire: toxic fumes. In case of fire: sulphur oxides, nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

Decomposition thermal: No data available

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1 Reactivity

## **ACUTE TOXICITY**

INGREDIENT	CAS	TYPICAL VALUES	VALUE - SPECIES
Cumene hydroperoxide	80-15-9	ORAL - LD 50 / 4 HOURS INHALATION - LC 50 / 4 HOURS DERMAL - LD 50 / 4 HOURS	382 mg/Kg - RAT 220 ppm - RAT 500 mg/Kg - RAT
Hydroxypropyl acrylate	27813-02-1	ORAL - LD50 DERMAL - LD50	> 5,000 mg/Kg - RAT > 5,000 mg/Kg - RABBIT
2-Hydroxyethyl Methacrylate	868-77-9	ORAL - LD50 DERMAL - LD50	5,564 mg/Kg - RAT > 3,000 mg/Kg - RABBIT
1-Acetyl-2-Phenylhydrazine	114-83-0	ORAL - LD50	270 mg/Kg - MOUSE

# **CORROSION - SKIN IRRITATION**

INGREDIENT	CAS	RESULT	SPECIES
Cumene hydroperoxide	80-15-9	SKIN - CORROSIVE	RABBIT
2-Hydroxyethyl Methacrylate	868-77-9	SKIN 24 HOURS - IRRITANT	RABBIT
1-Acetyl-2-Phenylhydrazine	114-83-0	SKIN 24 HOURS - IRRITANT	RABBIT

#### **GERM CELL MUTAGENICITY**

INGREDIENT	CAS	RESULT	SPECIES - REFERENCE
Cumene hydroperoxide	80-15-9	POSITIVE / NEGATIVE	MOUSE - OECD guideline 471

LD50 oral:> 5000 mg / kg ((estimated)) Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data. Acute toxicity (inhalation): Lack of data.

Skin corrosion: Lack of data.

Eye damage / irritation: Eye Irrit. 2; H319 = Causes severe eye irritation.

Respiratory sensitization: Lack of data.

Skin sensitisation: Skin Sens 1; H317 = May cause an allergic skin reaction. Germ cell mutagenicity / genotoxicity: Lack of data.

Carcinogenicity: Lack of data. Reproductive toxicity: Lack of data.

Effects on breastfeeding or via breastfeeding: Lack of data.

Specific toxicity for target organs (single exposure): Lack of data.

Specific toxicity for target organs (repeated exposure): Lack of data.

Danger of inhalation: Lack of data.

**SECTION 12: ENVIRONMENTAL INFORMATION** 

12.1 Toxicity

Hazard class for water: 1 = slightly hazardous

INGREDIENT	CAS	TYPICAL VALUES
Cumene hydroperoxide	80-15-9	Toxicity to fish LC50 - Oncorhynchus mykiss (Rainbow trout) - 3.9 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 16 mg/l - 24 h Persistence and degradability: Biotic / Aerobic biodegradability Readily biodegradable. Method: Closed bottle test
Hydroxypropyl acrylate	27813-02-1	Toxicity to fish Continuous flow test - Leuciscus Idus - 493 mg/l - 48 h Bacterial toxicity: EC 10 Pseudomonas putida - 1,140 mg/l - 16 h Persistence and degradability: Aerobic biodegradability Chemical oxygen demand Result: 94% - Readily biodegradable. Method: Closed bottle test
2-Hydroxyethyl Methacrylate	868-77-9	Toxicity to fish Continuous flow test - Pimephales promelas (Fathead minnow) - 227 mg/l - 96 h Persistence and degradability: Aerobic biodegradability Chemical oxygen demand Result: 84% - Readily biodegradable. Method: Closed bottle test
1-Acetyl-2-Phenylhydrazine	114-83-0	No data available

## 12.2. Persistence and degradability

Additional information: No data available

#### 12.3 Partition coefficient n-octanol/water

No data available

# 12.4 Mobility in soil

no data available

# 12.5 Results of PBT and vPvB assessments

no data available

#### 12.6 Other adverse effects

General notes: Do not allow penetration in soil, waterways or sewage systems.

## **SECTION 13: DISPOSAL RECOMMENDATIONS**

#### 13.1 Waste treatment methods

Waste code (Directive 2008/98 / EC, decision 2001/118 / EC)

08 04 09: waste adhesives and sealants containing organic solvents or other hazardous substances. Depending on the sector and production process, other EURAL hazardous waste codes may also be applicable according to Directive 2008/98 / EC.

Disposal methods: Disposal of product: Dispose of in accordance with all applicable local and national regulations. This product's contribution to waste is absolutely insignificant in comparison to the manufactured product on which it is used.

Packaging / Container: After usage, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in approved landfills, or incinerated. Disposal must be conducted according to official regulations.

Waste code: 08 04 09 waste adhesives and sealants containing organic solvents and other hazardous substances.

## **SECTION 14: DISPOSAL RECOMMENDATIONS**

14.1 UN number

Not applicable - Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR

## 14.2 UN proper shipping name

Not limited - Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR

## 14.3 UN proper shipping name

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR

#### 14.4 Packing group

Not applicable - Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR

## 14.5 Environmental hazards

Marine pollutant - IMDG: No

## 14.6 Special precautions for users

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No data available

#### SECTION 15: REGULATORY INFORMATION

Specific safety, health and environmental regulations / legislation for the substance or mixture Volatile organic compounds (VOCs): 0 % (1999/13 / EC)

#### 15.2 Chemical safety assessment

The chemical safety assessment was not performed.

#### **SECTION 16: OTHER INFORMATION**

Additional information

#### Abbreviations

PBT = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive - Directive on Hazardous Substances

DPD Dangerous Preparation Directive - Directive on Hazardous Preparations

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

#### Full text of H-phrases referred to under Sections 2 and 3:

H226 = Flammable liquid and vapours.

H242 = Risk of fire due to heating.

H302 = Harmful if swallowed.

H312 = Harmful in contact with skin.

H314 = Causes severe skin burns and serious damage to eyes.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H319 = Causes severe eye irritation.

H331 = Toxic if inhaled.

H332 = Toxic if inhaled.

H371 = May cause damage to organs.

H373 = May cause damage to organs in case of prolonged or repeated exposure.

H400 = Extremely toxic to aquatic life.

H411 = Toxic to aquatic life with long lasting effects.

#### R text phrases mentioned in Sections 2 and 3:

R 7 = May cause a fire.

R 10 = Flammable

R 20/21/22 = Harmful by inhalation, ingestion and skin contact.

R 21 = Harmful in contact with skin.

R 21/22 = Harmful in contact with skin and if swallowed.

R 23 = Toxic by inhalation.

R 34 = Causes burns.

R 35 = Causes severe burns.

R 36 = Irritating to eyes.

R 36/38 = Irritating to eyes and skin.

R 43 = May cause sensitization by contact with skin.

R 48/20/22 = Harmful: danger of serious damage to health in the case of prolonged exposure by inhalation and if swallowed.

R 50 = Highly toxic to aquatic organisms.

R 51/53 = Toxic to aquatic organisms, can cause long-term adverse effects.

R 68/22 = Harmful: possibility of adverse irreversible effects if ingested.

UPDATED DATA IN ACCORDANCE WITH SPECIFICATIONS FROM THE JOINT RESEARCH CENTRE - ESIS: European Chemical Substances Information System For abbreviations and acronyms, see ECHA

# SDS Revision July 2015

The information contained refers to a group of specific identified materials. DELTA considers this information reliable at the time of writing of the SDS. It is the responsibility of the user to verify the validity of the product's characteristics in relation to production needs, and to take all necessary measures for the protection of people and property from situations that may occur through the product's implementation. DELTA does not recognize any explicit and/or tacit liability for damages of any kind, incidental or arising from the inappropriate use of the product, including lost revenues. This safety data sheet was prepared in accordance with Directive 67/548 / EEC and subsequent amendments, Directive 1999/45 / EC, EC Regulation 1907/2006 and provides information relative to the safe use of the product.