Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

# **1.1. Product identifier**Product name: EMS FORCE® Pipe Sealant 5567Contains: Cumene hydroperoxide

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

1.2.1. Relevant identified uses

Use of the substance/mixture	:	Anaerobic sealant
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#### 1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier	<ul> <li>Metsan Endüstriyel Yapıştırıcılar Ticaret Anonim Şirketi</li> <li>Birlik Organize Sanayi Bölgesi Batı Caddesi 1.Sokak No.1</li> <li>34953 Tuzla, Istanbul TURKEY</li> <li>Telephone: +90 216 444 06 49</li> </ul>
Responsibility statement	Telefax: +90 212 253 42 12 Web: www.metsan.gen.tr : For further information please contact with following e-mail address, sds@metsan.gen.tr

#### 1.4. Emergency telephone number

Metsan: +90 212 235 52 55

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 [CLP] This mixture is not classified as hazardous according to Regulation (EC) 1272/2008 [GHS].

#### 2.2. Label elements

According to Regulation (EC) No. 1272/2008 [CLP] Hazard pictogram(s) Signal word Hazard statement(s) Physical hazards : Not classified. Health hazards : Not classified.



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

Environmental hazards	:	Not classified.
Precautionary statement(s)		
Prevention	:	P262: Do not get in eyes, on skin, or on clothing.

#### Supplemental information on label

Not applicable.

#### 2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

Name	CAS No. EC No.	REACH Registration No.	wt%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cumene hydroperoxide	80-15-9 201-254-7	01-2119475796-19	<0.5	Org. Perox. EF- H242 Acute Tox. 4- H302 Acute Tox. 4- H312 Acute Tox. 3- H331 Skin Corr. 1B- H314 C $\geq$ 10% Skin Corr 2- H315 3% $\leq$ C<10% Eye Dam. 1- H318 %3 $\leq$ C<%10 Eye irrit. 2-H319 %1 $\leq$ C<%3 STOT SE 3- H335 C<%10 STOT RE 2- H373 Asp. Tox. 1- H304 Aquatic Chr. 2- H411

• Up to the given revision date of this safety data sheet only the above mentioned REACH registration numbers are assigned to the chemical substances used in this mixture.

#### Additional information

See full text of H-phrases and classification codes in chapter 16.



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

#### Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

#### Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

#### Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

#### Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Please see practical experience in Section 11.

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

No information available.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

#### Unsuitable extinguishing media

Do not use high power water jet.



Version	:	1.1
Revision date	1	-
lssue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

#### 5.2. Special hazards arising from the substance or mixture

#### Hazardous combustion products

Closed containers exposed to heat from fire may build pressure and explode. Exposure to extreme heat can give rise to thermal decomposition.

#### Hazardous decomposition or by-products

Carbon dioxide Carbon monoxide Nitrogen oxides Sulfur oxides

#### 5.3. Advice for firefighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. When firefighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands (around arms, waist and legs), face mask, and protective covering for exposed areas of the head.

#### Special protective equipment and firefighting procedures

There is no specific recommended protective equipment other than suggested above.

#### Additional information

In case of fire, keep containers cool with water spray.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Refer to Section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Turn leaking containers leak-side up to prevent the escape of liquid.



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

#### 6.2. Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems. Please avoid any emission of volatile organic compounds as possible.

#### 6.3. Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts), concentrated (density: 0,880) ammonia solution (5 parts). After usage of suitable decontaminant, transfer the material to a closable, labelled salvage container for disposal by an appropriate method.

#### 6.4. Reference to other sections

For appropriate self-protection equipment, please apply the suggested protection procedures given in Section 8.

For disposal of waste, please see advices in Section 13.

#### **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling Safe handling advice

Avoid inhalation of thermal decomposition products. For industrial or professional use only. Store work clothes separately from other clothing, food and tobacco products. Do not handle until all safety precautions have been read and understood. Wash contaminated clothing before reuse. Avoid breathing vapours. Contaminated work clothing should not be allowed out of the workplace.

# 7.2. Conditions for safe storage, including any incompatibilities Requirements for storage areas and containers

Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

#### Advice on common storage

Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Do not store together with explosives, gases, oxidizing solids, products which



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

form flammable gases in contact with water, oxidizing products, infectious products and radioactive products.

#### Additional information on storage conditions

Protect against UV and sunlight. Keep away from heat sources and humid media.

#### 7.3. Specific end use(s)

Fixing and sealing of metallic pipes and fittings.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Community / national occupational exposure limit values

Cumene hydroperoxide (CAS No: 80-15-9)					
	Limit value – Eight hou	Limit value – Short term			
	ppm mg/m <sup>3</sup>		ppm	mg/m <sup>3</sup>	
Latvia	-	1	-	-	

- OEL values that are given in this subsection are taken from GESTIS International Limit Values database.
- If a component is disclosed in Section 3 but does not appear in the table given above, an occupational exposure limit value is not available for the corresponding component.

#### Information on monitoring procedures

DN(M)ELs

CAS No.	Chemical name	End use	Exposure routes	Frequency of exposure	Туре	Value
80-15-9	Cumene	Workers	All routes	-	-	WARNING: Some DNEL/PNEC values exist in the REACH disseminated dossier(s), but we are not confident in these data
00-10-7	hydroperoxide	Consumers	All routes	-	-	WARNING: Some DNEL/PNEC values exist in the REACH disseminated dossier(s), but we are not confident in these data



Version	:	1.1
Revision date	1	-
Issue date	:	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

- If a component is disclosed in Section 3 but does not appear in the table given above, a DN(M)EL is not available for the corresponding component.

ΡN	ECs
----	-----

CAS No. C	Chemical name	Environmental	Value	Extrapolation method	
		protection target		•	
		Freshwater	0.003 mg/L	Assessment factor: 1000	
		Marine water	0 mg/L	Assessment factor: 10000	
		Intermittent releases	0.031 mg/L	Assessment factor: 100	
		STP	0.35 mg/L	Assessment factor: 1	
80-15-9 hydroperoxide	Sediment (freshwater)	0.023 mg/kg sediment dw	Partition coefficient		
		Sediment (marine water)	0.002 mg/kg sediment dw	Partition coefficient	
		Soil	0.003 mg/kg soil dw	Partition coefficient	

- If a component is disclosed in Section 3 but does not appear in the table given above, a PNEC is not available for the corresponding component.

#### 8.2. Exposure controls

#### Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protection

Personal protection equipments

Eye protection

Skin protection

- should be worn if there is a risk of splashing of material.
  Hand and other skin protection
  Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be

Safety glasses with side shields or chemical safety goggles



Version	:	1.1
Revision date	:	-
lssue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

	based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical
	challenges such as temperature extremes, and other use
	conditions. Consult with your glove and/or protective
	clothing manufacturer for selection of appropriate
	compatible gloves/protective clothing. Gloves made from
	the following material(s) are recommended:
	- Butyl rubber at least 0.5 mm thickness
	- Fluoroelastomer at least 0.4 mm thickness
Respiratory protection :	In case of brief exposure or low pollution use respiratory filter
	device. In case of intensive or longer exposure use self-
	contained respiratory protective device.

#### Environmental exposure controls

Do not let product enter drains. For ecological information refer to Section 12. Also, check for Environmental Precautions in Section 6.

SECTION 9: Physical and chemical properties						
9.1. Information on basic physical and chemical properties						
Appearance :	Paste					
Color :	Off-white					
Odor :	Acrylate, characteristic					
Odor threshold :	No data available.					
Property	<u>Values</u>	<u>Method(s) and remark(s)</u>				
рН	Not applicable.					
Melting point/freezing point	Not applicable.					
Initial boiling point and boiling range	>149°C					
Flash point	>100°C					
Evaporation rate	Negligible.					
Flammability (solid, gas)	Not applicable.					

Upper flammability limit

Flammability limit in air

Not applicable.



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

Lower flammability limit	Not applicable.	
Vapor pressure	<666.6 Pa	at 26.5°C
Vapor density	No data available.	
	1.1	$at 20^{\circ}C$ (Def. water at $20^{\circ}C$ )
Relative density	1.1	at 20°C (Ref. water at 20°C)
Solubility(ies)		
In water	Not miscible.	at 25°C
In other solvent(s)	No data available.	
Partition coefficient: n-octanol/water	No data available.	· · · ·
Auto-ignition temperature	Not applicable.	
Decomposition temperature	No data available.	
Viscosity	400000 to 700000 cP	at 20°C
Explosive properties	Not classified.	
Oxidising properties	Not classified.	
9.2. Other data		
Property	<u>Values</u>	Method(s) and remark(s)
Softening temperature	No data available.	
VOCs content	No data available.	
Density	1.1 g/cm³	at 20°C
		•

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Keep away from oxidising agents and strongly acid or alkaline materials. Mixture can rapidly react with these materials and produce CO<sub>2</sub>.Evolution of CO<sub>2</sub> in closed containers causes overpressure and produces a risk of bursting.

#### 10.2. Chemical stability

The product is chemically stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization reaction may occur in large quantities only.

#### 10.4. Conditions to avoid



Version	1	1.1
Revision date	1	-
lssue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

Stable under recommended storage and handling conditions (see Section 7).

#### 10.5. Incompatible materials to avoid

Refer to reactivity in this section.

#### 10.6. Hazardous decomposition products

Refer to Section 5.2 for hazardous decomposition products during combustion.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects General observations

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Due to the absence of specific data on the mixture regarding interactions between component substances, relevant health effects of each substance are listed. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

#### Practical experience

No information available

#### Acute toxicity

CAS No.	Chemical name	Species	Туре	Exposure duration	Value	Method(s) and/or reference(s) and/or note(s)
	Current	Rat	LD50 Oral	-	382 mg/kg bw	-
80-15-9	80-15-9 Cumene hydroperoxide	Rat	LC50 Inhalation	4 h	220 ppm	-
	nyaroperoxide	Rat	LD50 Dermal	-	1.20-1.52 mg/kg bw	-

#### Skin corrosion/irritation

CAS No.	Chemical name	Species	Exposure duration	Result	Method(s) and/or reference(s) and/or note(s)
80-15-9	Cumene hydroperoxide	Rabbit	72 h	Strong skin reactions	-



Version	:	1.1
Revision date	:	-
Issue date	:	03/03/2019
Form no	1	0101060041



# SAFETY DATA SHEET EMS FORCE<sup>®</sup> Pipe Sealant 5567 according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

#### Serious eye damage/irritation

CAS No.	Chemical name	Species	Exposure duration	Result	Method(s) and/or reference(s) and/or note(s)
80-15-9	Cumene hydroperoxide	Rabbit	24 h	Severe irritation	-

#### Respiratory or skin sensitisation

CAS No.	Chemical name	Species	Exposure duration	Result	Method(s) and/or reference(s) and/or note(s)
		Guinea pig	-	Not sensitising	-
98-82-8	Cumene	Guinea pig	48 h	Not sensitising	OECD Guideline 406

#### Germ cell mutagenicity

CAS No.	Chemical name	Species	Туре	Route	Result	Method(s) and/or reference(s) and/or note(s)
	Cumene hydroperoxide	MX100	Gene mutation	In vitro	Mutagenic	-
80-15-9		PQ300, PQ37	Gene mutation	In vitro	Mutagenic	-
		Mouse	Dermal	In vivo	Not mutagenic	-
		Mouse	Intraperitoneal	In vivo	Not mutagenic	-

#### Carcinogenicity

CAS No.	Chemical name	Species	Туре	Exposure duration	Result	Method(s) and/or reference(s) and/or note(s)
80-15-9	Cumene hydroperoxide	Mouse	Subcutaneous	-	Inconclusive result	-

#### Reproductive toxicity

CAS Chemical Species	Type Exposure duration	Result	
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Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

98-82-8	Cumene	Rat	Inhalation	90 days	NOAEL	OECD Guideline
					2= 1 200 ppm	415

#### STOT – Single exposure

No information available.

#### STOT – Repeated exposure

No information available.

#### Aspiration hazard

No information available.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No test data available for the product.

#### Acute (short-term) toxicity

CAS No.	Chemical name	Species	Exposure duration	Test endpoint	Result	Method(s) and/or reference(s) and/or note(s)
		Oncorhynchus		NOEC	1.5 mg/L	OECD Guideline
		mykiss (fish)	96 h	LC50	3.9 mg/L	203
	Cumons	TTYKISS (TISTI)		LC100	6.0 mg/L	
				EC0	2.2 mg/L	-
			24 h	EC50	7.0 mg/L	
80-15-9	Cumene hydroperoxide			EC100	25 mg/L	
	nydroperoxide	Daphnia	48 h	EC10	1.3 mg/L	-
		magna (invertebrates)	48 h	NOEC	1.6 mg/L	-
		(inverteblates)	24 h	EC50	2.45 mg/L	-
			24 h	EC10	1.4 mg/L	-
			24 h	NOEC	1.6 mg/L	-

#### Chronic (long-term) toxicity

CAS No.	Chemical name	Species	Exposure duration	Test endpoint	Result	Method(s) and/or reference(s) and/or note(s)
98-82-8	Cumene	P.promelas (fish)	28 day	NOEC	0.38 mg/L	



Version	:	1.1
Revision date	:	-
Issue date	:	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

	Daphnia magna (invertebrates)	21 day	NOEC	0.35 mg/L	OECD Guideline 211
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#### Toxicity to aquatic algae and cyanobacteria

CAS No.	Chemical name	Species	Exposure duration	Test endpoint	Result	Method(s) and/or reference(s) and/or note(s)
		Scenedesmus quadricauda	8 days	EC3 (TT)	7.4 mg/L	-
			72 h	EC50	3.1 mg/L	
80-15-9	Cumene			NOEC	1.0 mg/L	
80-12-9	hydroperoxide	Desmodesmus	72 h	EC10	1.35 mg/L	OECD Guideline
		subspicatus	72 h	NOEC	1.49 mg/L	201
			72 h	EC50	1.29 mg/L	
			72 h	EC10	0.697 mg/L	
			72 h	NOEC	0.73 mg/L	

#### 12.2. Persistence and degradability

The product can be biodegradable as its ingredients are all classified as biodegradable.

CAS No.	Chemical name	Test type	Study type	Duration	Degradation %	Method(s) and/or reference(s) and/or note(s)
80-15-9	Cumene	Ready	CO <sub>2</sub> evolution	5 days	64%	OECD Guideline
00-13-7	hydroperoxide	biodegradability		28 days	99%	301 B

#### 12.3. Bioaccumulative potential

CAS No.	Chemical name	Log K <sub>ow</sub>	BCF	Result	Method(s) and/or reference(s) and/or note(s)
80-15-9	Cumene hydroperoxide	2.16	9	No bioaccumulation potential.	-

#### 12.4. Mobility in soil

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Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

No information available.

#### 12.5. Results of PBT and vPvB assessment

Based on available data no ingredient is classified for this hazard property (please see section 3).

#### 12.6. Other adverse effects

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 3 for details.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Dispose of in accordance with local regulations.

Product disposal :	Contribution of this product to waste is very insignificant in comparison to article in which it is used.
Packaging disposal :	After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.
Waste disposal number of waste from	n residues/unused products
08 04 09 :	· · · · · · · · · · · · · · · · · · ·
Waste disposal number of used prod	uct
08 04 09 :	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances Classified as hazardous waste.



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

#### Waste disposal number of used product

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS,
FILTER MATERIALS AND PROTECTIVE CLOTHING NOT
OTHERWISE SPECIFIED; packaging (including separately
collected municipal packaging waste); packaging containing
residues of or contaminated by dangerous substances
Classified as hazardous waste.

#### **SECTION 14: Transport information**

#### 14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

#### 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

#### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

#### 14.4. Packaging group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

#### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

#### 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR/ICAO-TI.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

#### **SECTION 15: Regulatory information**

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

#### Australia (AICS)

All ingredients are on the inventory or exempt from listing.

#### Canada (DSL)



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	:	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

All ingredients are on the inventory or exempt from listing.

#### Canada (NDSL)

None of the ingredients are on the inventory of NDSL.

**China (IECSC)** All ingredients are on the inventory or exempt from listing.

**European Union (EINECS)** All ingredients are on the inventory or exempt from listing.

**European Union (ELINCS)** None of the ingredients are on the inventory of ELINCS.

Japan (ENCS) All ingredients are on the inventory or exempt from listing.

#### **Philippines (PICCS)** All ingredients are on the inventory or exempt from listing.

#### South Korea (KECI)

All ingredients are on the inventory or exempt from listing.

#### Taiwan (TCSI)

All ingredients are on the inventory or exempt from listing.

#### United States of America (TSCA)

All ingredients are on the inventory or exempt from listing.

#### 15.2. Chemical Safety Assessment

No safety checks were carried out on the mixture.

#### **SECTION 16: Other information**

Information taken from reference works and the literature



Version	:	1.1
Revision date	1	-
Issue date	1	03/03/2019
Form no	1	0101060041



according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

This SDS is prepared via using latest available SDS of ingredients that are provided from the manufacturers. Also, to confirm the validity of data and to give all necessary information, several databases are used. This references are listed below.

Substance number	:	CAS No. – https://scifinder.cas.org
OEL values	:	GESTIS – http://limitvalue.ifa.dguv.de/
DN(M)EL and PNEC values	:	ECHA – http://echa.europa.eu/information-on-chemicals
Inventories given in Section 15	:	AICS – http://nicnas.gov.au/search
		DSL & NDSL – http://ec.gc.ca/lcpe-
		cepa/eng/substance/chemicals_polymers.cfm
		IECSC – http://cciss.cirs-group.com/
		EINECS & ELINCS- http://echa.europa.eu/information-on-
		chemicals/ec-inventory
		ENCS – http://safe.nite.go.jp/english/db.html
		KECI – http://ncis.nier.go.kr/totinfo/TotInfoList.jsp
		PICCS –
		http://119.92.161.5/internal/public/searchprojects.aspx
		TCSI - http://csnn.osha.gov.tw/content/home/index.aspx
		TSCA - http://www.epa.gov/tsca-inventory
Abbreviations and acronyms		
<b>Abbreviations and acronyms</b> ADN	:	European Agreement concerning the International Carriage
-	:	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
-		European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage
ADN		of Dangerous Goods by Inland Waterways
ADN		of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage
ADN ADR	:	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN ADR AGS	:	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances
ADN ADR AGS AICS	: : :	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances
ADN ADR AGS AICS ATE	: : :	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances Acute Toxicity Estimate
ADN ADR AGS AICS ATE BCF	::	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances Acute Toxicity Estimate Bioconcentration factor
ADN ADR AGS AICS ATE BCF BOD	::	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances Acute Toxicity Estimate Bioconcentration factor Biological Oxygen Demand
ADN ADR AGS AICS ATE BCF BOD CAS	::	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances Acute Toxicity Estimate Bioconcentration factor Biological Oxygen Demand Chemical Abstracts Service
ADN ADR AGS AICS ATE BCF BOD CAS	::	of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road The German Committee on Hazardous Substances Australian Inventory of Chemical Substances Acute Toxicity Estimate Bioconcentration factor Biological Oxygen Demand Chemical Abstracts Service Classification Labelling Packaging Regulation; Regulation



Version	:	1.1
Revision date	:	-
Issue date	:	03/03/2019
Form no	1	0101060041



# SAFETY DATA SHEET EMS FORCE<sup>®</sup> Pipe Sealant 5567 according to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 2015/830

DN(M)EL	:	Derived No (Minimal) Effect Level
DSD	:	Dangerous Substances Directive 67/548/EEC
DSL	:	Domestic Substances List
EC	:	European Community
ECO	:	Effective Concentration that
		Produces a Stimulation Index of 0
EC3	:	Effective Concentration that
		Produces a Stimulation Index of 3
EC50	:	Half Maximal Effective Concentration
EINECS	:	European Inventory of Existing Commercial Substances
ELINCS	:	European List of notified Chemical Substances
EN	:	European Standard
ENCS	:	Japanese Existing and New Chemical Substances Inventory
GHS	:	Globally Harmonized System
IATA	:	International Air Transport Association
ICAO-TI	:	Technical Instructions for the Safe Transport of Dangerous
		Goods by Air
IECSC	:	Inventory of Existing Chemical Substances in China
IMDG	:	International Maritime Dangerous Goods
KECI	:	Korea Existing Chemicals Inventory
LC50	:	Lethal Concentration to 50 % of a test population
LD50	:	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOEC	:	Lowest Observable Effect Concentration
Log K <sub>ow</sub>	:	Log10 of octanol-water partition coefficient
NDSL	:	Non-Domestic Substances List
NIOSH	:	The National Institute for Occupational Safety and Health
NOEC	:	No Observed Effect Concentration
OECD	:	Organization for Economic Co-operation and Development
OEL	:	Occupational Exposure Limit
OSHA	:	Occupational Safety & Health Administration
OSHA	:	European Agency for Safety and Health at work
PBT	:	Persistent, Bioaccumulative and Toxic substance



Version	:	1.1
Revision date	1	-
lssue date	1	03/03/2019
Form no	1	0101060041



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PICCS :	Philippine Inventory of Chemicals and Chemical Substances
PNEC :	Predicted No Effect Concentration
REACH :	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID :	Regulations concerning the International Carriage of
	Dangerous Goods by Rail
SDS :	Safety data sheet
STOT :	Specific Target Organ Toxicity
TCSI :	Taiwan Chemical Substance Inventory
TOC :	Total Organic Carbon
TSCA :	Toxic Substances Control Act
VOC :	Volatile Organic Compound
vPvB :	Very Persistent and Very Bioaccumulative

#### **Revision changes**

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#### Composer of Safety Data Sheet

Şeyma ÇABUK / Metsan R&D Department sds@metsan.gen.tr, +90 444 0 649 Certification program/company: TSE Certificate number: GBF-A-0-2398

#### Additional information

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#### Disclaimer

This company shall not be held liable for any damage resulting from handling or from contact with the above product. The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed on how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to



Version	1	1.1
Revision date	1	-
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describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.



