

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Revision date:
04/04/2016

Date of issue:
25/10/2013

Version:2.0

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

1.1. Product identifier

Product form : Mixture
Product Name : EPM1-2493 Part A
Synonyms : Controlled Volatility Silicone Elastomer

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 : To provide heat transfer between electrical/electronic components.
For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
ehs@nusil.com
www.nusil.com

1.4. Emergency telephone number

Emergency : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and
number : Maritime)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (CLP) :

P264 - Wash hands, forearms and other exposed areas thoroughly after handling
P280 - Wear eye protection, protective clothing, eye protection, face protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Continue rinsing
P321 - Specific treatment (see section 4 on this SDS)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other Hazards

Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminum oxide	(CAS No) 1344-28-1 (EC no) 215-691-6	80 - 85	Not classified
Siloxanes and Silicones, dimethyl, vinyl group-terminated	(CAS No) 68083-19-2	15 - 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of First Aid Measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact : Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/injuries : Causes serious eye irritation. Causes skin irritation.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms : None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

SECTION 5: Firefighting measures

5.1. Extinguishing Media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special Hazards Arising From the Substance or Mixture

- Fire hazard : Not considered flammable but may burn at high temperatures.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

7.3. Specific end use(s)

To provide heat transfer between electrical/electronic components. For professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Aluminum oxide (1344-28-1)		
Austria	MAK (mg/m ³)	5 mg/m ³ (alveolar dust, respirable fraction, smoke)
Austria	MAK Short time value (mg/m ³)	10 mg/m ³ (alveolar dust, respirable fraction, smoke)
Belgium	Limit value (mg/m ³)	1 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
France	VME (mg/m ³)	10 mg/m ³
Greece	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Latvia	OEL TWA (mg/m ³)	6 mg/m ³ (disintegration aerosol)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Switzerland	VLE (mg/m ³)	24 mg/m ³ (respirable dust, smoke)
Switzerland	VME (mg/m ³)	3 mg/m ³ (respirable dust, smoke)
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³ (total) 2 mg/m ³ (respirable)
Estonia	OEL TWA (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
Hungary	AK-érték	6 mg/m ³ (respirable dust)
Lithuania	IPRV (mg/m ³)	5 mg/m ³ (inhalable fraction) 2 mg/m ³ (respirable fraction)
Norway	Grenseverdier (AN) (mg/m ³)	10 mg/m ³ (equal to the standard for nuisance dust)
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	10 mg/m ³ (equal to the standard for nuisance dust)
Poland	NDS (mg/m ³)	2,5 mg/m ³ (inhalable fraction) 1,2 mg/m ³ (respirable fraction)
Romania	OEL TWA (mg/m ³)	2 mg/m ³ (regulated under Aluminium oxide-aerosol) 3 mg/m ³ 1 mg/m ³
Romania	OEL TWA (ppm)	0,5 ppm (regulated under Aluminium oxide-aerosol)
Romania	OEL STEL (mg/m ³)	5 mg/m ³ (aerosol) 10 mg/m ³ (dust) 3 mg/m ³ (fume)
Romania	OEL STEL (ppm)	1,2 ppm (regulated under Aluminium oxide-aerosol)
Slovakia	NPHV (priemerná) (mg/m ³)	1,5 mg/m ³ (fume) 1,5 mg/m ³ 0,1 mg/m ³ (regulated under .gamma.-Aluminum oxide-respirable fraction)
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³ (total dust) 2 mg/m ³ (respirable dust)


EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Aluminum oxide (1344-28-1)		
Portugal	OEL TWA (mg/m ³)	10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.
- Personal protective equipment : Protective goggles. Gloves. Protective clothing.
- 
- Materials for protective clothing : Chemically resistant materials and fabrics.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Chemical goggles.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
- Environmental exposure controls : Do not allow the product to be released into the environment.
- Consumer exposure controls : Do not eat, drink or smoke during use.
- Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : White
- Odour : Odourless
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : > 275 °C (527 °F)
- Self ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative Density : 2,3 (Water=1)
- Solubility : No data available
- Log Pow : No data available
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidising properties : No data available

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Explosive limits : No data available

9.2. Other information

VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Aluminum oxide (1344-28-1)	
LD50 oral rat	> 5000 mg/kg

Siloxanes and Silicones, dimethyl, vinyl group-terminated (68083-19-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 600 mg/m ³

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

EPM1-2493 Part A	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

EPM1-2493 Part A	
Bioaccumulative potential	Not established.

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 1 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

EPM1-2493 Part A

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

SECTION 16: Other information

Indication of changes:

Section	Section Header	Change	Date Changed
1.3	Details of the supplier of the safety data sheet	Modified	04/04/2016
2	Hazards identification	Added Skin Irrit. 2 H315, Eye Irrit. 2 H319. Removed DSD/DPD information.	04/04/2016
2.3	Other hazards	Modified	04/04/2016
3	Composition/information on ingredients	New components replaced old components. Reclassified mixture based on new composition. Removed not classified components and components below cutoffs. Removed DSD/DPD information.	04/04/2016
4	First aid measures	Modified	04/04/2016
11	Toxicological information	Modified	04/04/2016
15.1.1	EU-Regulations	Modified	04/04/2016

Revision date : 04/04/2016

Data sources : According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation
H319	Causes serious eye irritation

Nusil EU GHS SDS

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Nusil Technology, it is the user's obligation to determine the conditions of safe use of the product.

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Revision date:
04/04/2016

Date of issue:
25/10/2013

Version:2.0

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

1.1. Product identifier

Product form : Mixture
Product Name : EPM1-2493 Part B
Synonyms : Controlled Volatility Silicone Elastomer

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 : To provide heat transfer between electrical/electronic components.
For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
ehs@nusil.com
www.nusil.com

1.4. Emergency telephone number

Emergency : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and
number : Maritime)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (CLP) :

P264 - Wash hands, forearms and other exposed areas thoroughly after handling
P280 - Wear eye protection, protective clothing, eye protection, face protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

minutes. Remove contact lenses, if present and easy to do.
Continue rinsing
P321 - Specific treatment (see section 4 on this SDS)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other Hazards

Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminum oxide	(CAS No) 1344-28-1 (EC no) 215-691-6	80 - 85	Not classified
Siloxanes and Silicones, dimethyl, vinyl group-terminated	(CAS No) 68083-19-2	15 - 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Siloxanes and Silicones, dimethyl, methyl hydrogen	(CAS No) 68037-59-2	1,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of First Aid Measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact : Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/injuries : Causes serious eye irritation. Causes skin irritation.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms : None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

SECTION 5: Firefighting measures

5.1. Extinguishing Media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special Hazards Arising From the Substance or Mixture

- Fire hazard : Not considered flammable but may burn at high temperatures.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

7.3. Specific end use(s)

To provide heat transfer between electrical/electronic components. For professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Aluminum oxide (1344-28-1)		
Austria	MAK (mg/m ³)	5 mg/m ³ (alveolar dust, respirable fraction, smoke)
Austria	MAK Short time value (mg/m ³)	10 mg/m ³ (alveolar dust, respirable fraction, smoke)
Belgium	Limit value (mg/m ³)	1 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
France	VME (mg/m ³)	10 mg/m ³
Greece	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Latvia	OEL TWA (mg/m ³)	6 mg/m ³ (disintegration aerosol)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Switzerland	VLE (mg/m ³)	24 mg/m ³ (respirable dust, smoke)
Switzerland	VME (mg/m ³)	3 mg/m ³ (respirable dust, smoke)
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³ (total) 2 mg/m ³ (respirable)
Estonia	OEL TWA (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
Hungary	AK-érték	6 mg/m ³ (respirable dust)
Lithuania	IPRV (mg/m ³)	5 mg/m ³ (inhalable fraction) 2 mg/m ³ (respirable fraction)
Norway	Grenseverdier (AN) (mg/m ³)	10 mg/m ³ (equal to the standard for nuisance dust)
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	10 mg/m ³ (equal to the standard for nuisance dust)
Poland	NDS (mg/m ³)	2,5 mg/m ³ (inhalable fraction) 1,2 mg/m ³ (respirable fraction)
Romania	OEL TWA (mg/m ³)	2 mg/m ³ (regulated under Aluminium oxide-aerosol) 3 mg/m ³ 1 mg/m ³
Romania	OEL TWA (ppm)	0,5 ppm (regulated under Aluminium oxide-aerosol)
Romania	OEL STEL (mg/m ³)	5 mg/m ³ (aerosol) 10 mg/m ³ (dust) 3 mg/m ³ (fume)
Romania	OEL STEL (ppm)	1,2 ppm (regulated under Aluminium oxide-aerosol)
Slovakia	NPHV (priemerná) (mg/m ³)	1,5 mg/m ³ (fume) 1,5 mg/m ³ 0,1 mg/m ³ (regulated under .gamma.-Aluminum oxide-respirable fraction)
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³ (total dust) 2 mg/m ³ (respirable dust)


EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Aluminum oxide (1344-28-1)		
Portugal	OEL TWA (mg/m ³)	10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.
- Personal protective equipment : Protective goggles. Gloves. Protective clothing.
- 
- Materials for protective clothing : Chemically resistant materials and fabrics.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Chemical goggles.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
- Environmental exposure controls : Do not allow the product to be released into the environment.
- Consumer exposure controls : Do not eat, drink or smoke during use.
- Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : White
- Odour : Odourless
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : > 275 °C (527 °F)
- Self ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative Density : 2,3 (Water=1)
- Solubility : No data available
- Log Pow : No data available
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidising properties : No data available

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Explosive limits : No data available

9.2. Other information

VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Aluminum oxide (1344-28-1)	
LD50 oral rat	> 5000 mg/kg

Siloxanes and Silicones, dimethyl, vinyl group-terminated (68083-19-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 600 mg/m ³

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

EPM1-2493 Part B	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

EPM1-2493 Part B	
Bioaccumulative potential	Not established.

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 1 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

EPM1-2493 Part B

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

SECTION 16: Other information

Indication of changes:

Section	Section Header	Change	Date Changed
1.3	Details of the supplier of the safety data sheet	Modified	04/04/2016
2	Hazards identification	Added Skin Irrit. 2 H315, Eye Irrit. 2 H319. Removed DSD/DPD information.	04/04/2016
2.3	Other hazards	Modified	04/04/2016
3	Composition/information on ingredients	New components replaced old components. Reclassified mixture based on new composition. Removed not classified components and components below cutoffs. Removed DSD/DPD information.	04/04/2016
4	First aid measures	Modified	04/04/2016
11	Toxicological information	Modified	04/04/2016
15.1.1	EU-Regulations	Modified	04/04/2016

Revision date : 04/04/2016

Data sources : According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Nusil EU GHS SDS

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Nusil Technology, it is the user's obligation to determine the conditions of safe use of the product.