For easy and precise additions of Barium Sulfate to high consistency silicone materials. For professional use only



Safety Data Sheet According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 19/06/2018 Date of issue: 15/08/2013

Version: 3.0

SECTION 1: Identification of the Substance/mixture and of the Company/Undertaking

1.1. Product Identifier

MED2-4102

Product form Product Name Synonyms Mixture MED2-4102 Barium Sulfate Masterbatch

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

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 <u>ehs@nusil.com</u> www.nusil.com

1.4. Emergency Telephone Number

Emergency Number

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

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP] Not classified

2.2. Label Elements

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

No labelling applicable

2.3. Other Hazards

Other Hazards Not Contributing Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier		Classification According to Regulation (EC) No. 1272/2008 [CLP]
Barium sulfate	(CAS-No.) 7727-43-7 (EC-No.) 231-784-4	70 - 80	Not classified

Safety Data Sheet According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 where
	possible).
First-Aid Measures After	When symptoms occur: go into open air and ventilate
Inhalation	suspected area. Obtain medical attention if breathing difficulty persists.
First-Aid Measures After Skin	Remove contaminated clothing. Drench affected area with
Contact	water for at least 5 minutes. Obtain medical attention if irritation
	develops or persists.
First-Aid Measures After Eye	Rinse cautiously with water for at least 5 minutes. Remove
Contact	contact lenses, if present and easy to do. Continue rinsing.
	Obtain medical attention if irritation develops or persists.
First-Aid Measures After	Rinse mouth. Do NOT induce vomiting. Obtain medical
Ingestion	attention.
	ms and Effects Both Acute and Delayed
Symptoms/Effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/Effects After	Prolonged exposure may cause irritation.
Inhalation	
Symptoms/Effects After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Effects After Eye Contact	May cause slight irritation to eyes.
Symptoms/Effects After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	None expected under normal conditions of use.
4.3. Indication of Any Imme	ediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media	Water spray, fog, carbon dioxide (CO2), alcohol-resistant foam, or dry chemical.
Unsuitable Extinguishing Media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.
5.2 Spacial Hazarda Arisina B	, ,
5.2. Special Hazards Arising F	rom 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.
Hazardous Decomposition	Carbon oxides (CO, CO2). Silicon oxides. Sulfur compounds.
Products in Case of Fire	Barium oxides.
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,

EN (English)

Safety Data Sheet According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General MeasuresAvoid prolonged contact with eyes, skin and clothing. Avoid
breathing (vapor, mist, spray).6.1.1. For Non-Emergency PersonnelUse appropriate personal protective equipment (PPE).Protective EquipmentUse appropriate personal protective equipment (PPE).Emergency ProceduresEvacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Upon arrival at the scene, a first responder is expected to
	recognize the presence of dangerous goods, protect oneself
	and the public, secure the area, and call for the assistance of
	trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials 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	Clean up spills immediately and dispose of waste safely.
	Transfer spilled material to a suitable container for disposal.
	Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Precautions for Safe Handling	Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or
	smoking and when leaving work.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety
	procedures.
7.2. Conditions for Safe Stora	ge, Including Any Incompatibilities
Technical Measures	Comply with applicable regulations.
Storage Conditions	Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or

Incompatible Materials

low temperatures and incompatible materials. Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(S)

For easy and precise additions of Barium Sulfate to high consistency silicone materials. For professional use only

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

Barium sulfate (7727-43-7)		
Belgium	Limit value (mg/m³)	10 mg/m³

Safety Data Sheet According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Bulgaria	OEL TWA (mg/m³)	10 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³ (total dust) 4 mg/m³ (respirable dust)
Ireland	OEL (8 hours ref) (mg/m³)	2 mg/m³ (respirable dust)
Ireland	OEL (15 min ref) (mg/m3)	6 mg/m ³ (calculated-respirable dust)
Portugal	OEL TWA (mg/m³)	10 mg/m ³
Slovakia	NPHV (priemerná) (mg/m³)	1,5 mg/m ³
Spain	VLA-ED (mg/m³)	10 mg/m ³ (this value is for the particulate matter that is free from Asbestos and contains less than 1% of crystalline Silica)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable dust) 4 mg/m³ (respirable dust)
United Kingdom	WEL STEL (mg/m³)	30 mg/m ³ (calculated-inhalable dust) 12 mg/m ³ (calculated-respirable dust)

8.2. **Exposure Controls**

Appropriate Engineering Controls	Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
Personal Protective Equipment	Gloves. Protective clothing. Protective goggles.
Materials for Protective Clothing Hand Protection Eye Protection Skin and Body Protection Respiratory Protection	Chemically resistant materials and fabrics. Wear protective gloves. Chemical safety goggles. Wear suitable protective clothing. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information	When using, do not eat, drink or smoke.

SECTION 9: Physical and Chemical Hazards

9.1. Information on Basic Physical and Chemical Properties

		Chernical Hopenia
Physical State		Liquid
Colour		White Paste
Odour		Odourless
Odour Threshold		No data available
рН		No data available
Evaporation Rate		No data available
Melting Point		No data available
Freezing Point		No data available
Boiling Point		No data available
Flash Point		> 135 °C (> 275 °F)
Auto-Ignition Temperature		No data available
Decomposition Temperature		No data available
Flammability (Solid, Gas)		Not applicable
19/06/2018	EN (English)	

Safety Data Sheet

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

Vapour Pressure Relative Vapour Density At 20 °C **Relative Density** Solubility Partition Coefficient n-Octanol/Water Viscosity, Kinematic Viscosity, Dynamic **Explosive Properties Oxidising Properties Explosive Limits**

No data available No data available 2,31 Water: insouble No data available Not applicable

9.2. Other Information

No additional information available

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, and incompatible materials.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

None expected under normal conditions of use.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity Not classified Barium sulfate (7727-43-7) LD50 Oral Rat > 5000 mg/kg Skin Corrosion/Irritation Not classified Eye Damage/Irritation Not classified Respiratory or Skin Sensitization 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 Ecology - General Not classified. 12.2. Persistence and Degradability MED2-4102 EN (Enalish)

Safety Data Sheet

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

MED2-4102		
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potential		
MED2-4102		
Bioaccumulative potential	Not established.	
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

Product/Packaging Disposal	Dispose of contents/container in accordance with local,
Recommendations	regional, national, and international regulations.
Additional Information	Container may remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials	Avoid release to the environment.

SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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

4.1. UN Number
ot regulated for transport
4.2. UN Proper Shipping Name
ot regulated for transport
4.3. Transport Hazard Class(Es)
ot regulated for transport
4.4. Packing Group
ot regulated for transport
4.5. Environmental Hazards
ot regulated for transport

14.6. Special Precautions For User

No additional information available

14.7. Transport in Bulk According to Annex II of MARPOL 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

Safety Data Sheet

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

Barium sulfate (7727-43-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on ELINCS (European List of Notified Chemical Substances)

15.1.2. National Regulations

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

Indication of Changes

Section	Section Header	Change	Date Changed
2	Classification of the substance or mixture	Modified	19/06/2018
3	Composition/information on ingredients	Modified	19/06/2018

Date of Preparation or Latest Revision 19/06/2018 Data Sources Information

Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS. According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

MARPOL - International Convention for the Prevention of Pollution

NDS - Naiwyzsze Dopuszczalne Stezenie

Other Information

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road ATE - Acute Toxicity Estimate BCF - Bioconcentration Factor BEI - Biological Exposure Indices (BEI) BOD – Biochemical Oxygen Demand CAS No. - Chemical Abstracts Service Number CLP - Classification, Labeling and Packaging Regulation (EC) No 1272/2008 COD – Chemical Oxygen Demand EC – European Community EC50 - Median Effective Concentration EEC - European Economic Community EINECS - European Inventory of Existing Commercial Chemical Substances EmS-No. (Fire) - IMDG Emergency Schedule Fire EmS-No. (Spillage) - IMDG Emergency Schedule Spillage EU – European Union FrC50 - FC50 in Terms of Reduction Growth Rate GHS - Globally Harmonized System of Classification and Labeling of Chemicals IARC - International Agency for Research on Cancer IATA - International Air Transport Association IBC Code - International Bulk Chemical Code IMDG - International Maritime Dangerous Goods IPRV - Ilgalaikio Poveikio Ribinis Dydis IOELV - Indicative Occupational Exposure Limit Value LC50 - Median Lethal Concentration LD50 - Median Lethal Dose LOAEL - Lowest Observed Adverse Effect Level LOEC - Lowest-Observed-Effect Concentration Log Koc - Soil Organic Carbon-water Partitioning Coefficient Log Kow - Octanol/water Partition Coefficient Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a twophase system consisting of two largely immiscible solvents, in this case octanol and water MAK - Maximum Workplace Concentration/Maximum Permissible Concentration

NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration NRD - Nevirsytinas Ribinis Dydis NTP – National Toxicology Program OEL - Occupational Exposure Limits PBT - Persistent, Bioaccumulative and Toxic PEL - Permissible Exposure Limit pH – Potential Hydrogen REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail SADT - Self Accelerating Decomposition Temperature SDS - Safety Data Sheet STEL - Short Term Exposure Limit TA-Luft - Technische Anleitung zur Reinhaltung der Luft TEL TRK – Technical Guidance Concentrations ThOD – Theoretical Oxygen Demand TLM - Median Tolerance Limit TLV - Threshold Limit Value TPRD - Trumpalaikio Poveikio Ribinis Dydis TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine IRGS 900 - Technische Regel für Gefahrstoffe 900 - Arbeitsplatzgrenzwerte IRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte TSCA - Toxic Substances Control Act TWA - Time Weighted Average VOC – Volatile Organic Compounds VLA-EC - Valor Límite Ambiental Exposición de Corta Duración VLA-ED - Valor Límite Ambiental Exposición Diaria VLE – Valeur Limite D'exposition VME - Valeur Limite De Moyenne Exposition vPvB - Verv Persistent and Verv Bioaccumulative WEL – Workplace Exposure Limit

WGK - Wassergefährdungsklasse

Nusil EU GHS SDS

Safety Data Sheet

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

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLYDISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT **RECALL OR BUSINESS INTERRUPTION.**



Silicone Sales & Services UK - Ireland - Benelux

© 2020 - Polymer Systems Technology Limited™ Unit 2. Network 4. Cressex Business Park, Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: https://www.silicone-polymers.com

email: sales@silicone-polymers.co.uk

