CV-2646 Part A

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Revision Date: 15/03/2023 Date of Issue: 02/05/2014 Version: 5.0

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

1.1. Product Identifier

Product Form	Mixture
Product Name	CV-2646 Part A
Synonyms	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	For professional use only.

1.2.2. Uses Advised Against

Uses Advised Against	No additional information available.

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology Europe
1198 Avenue Maurice Donat
Le Natura Bt. 2
06250 Mougins
France
+33 4 92 96 93 31
productstewardship@avantorsciencesgcc.com
www.nusil.com

1.4. Emergency Telephone Number

Emergency Number	+1 703-527-3887 CHEMTREC (International and Maritime) 800-424-9300 CHEMTREC (in US) +(44)-870-8200418 +(353)-19014670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 3	H412

Full text of hazard classes, H-statements: see section 16

2.2. Label Elements

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

Hazard Pictograms (CLP)

GHS07 GHS09

Signal Word (CLP)	Warning
Hazard Statements (CLP)	H317 - May cause an allergic skin reaction. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary Statements (CLP)	P261 - Avoid breathing vapours, mist, spray. P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see Section 4 on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0.1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
Nickel*	(CAS-No.) 7440-02-0 (EC-No.) 231-111-4 (EC Index-No.) 028-002-00-7	65 - 75	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Silver	(CAS-No.) 7440-22-4 (EC-No.) 231-131-3	10 - 20	Not classified

Full text of H-statements: see section 16

*The Nickel component of this product is bound in a silicone matrix. The chronic hazards usually associated with Nickel are not applicable to this product..

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 Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact: Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.

First-Aid Measures After Eye Contact	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for at least 15 minutes. Obtain medical attention.
First-Aid Measures After Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects	Skin sensitisation.
Symptoms/Effects After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Effects After Skin Contact	May cause an allergic skin reaction.
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 Immediate 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 (CO_2), 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. 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.
Hazardous Combustion Products	Carbon oxides (CO, CO_2). Formaldehyde. Metal oxides. Silicon 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, including respiratory protection.
Other Information	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Avoid breathing (vapour, mist, spray). Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate 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 recognise 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. Avoid release to the environment. Collect spillage.

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. Absorb and/or contain spill with inert material. 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

Additional Hazards When Processed	Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours.
Precautions for Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapours, 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 Storage, Including Any Incompatibilities

Technical Measures	Comply with applicable regulations.
Storage Conditions	Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible Materials	Strong acids, strong bases, strong oxidizers. Organic solvents. Hydrogen. Ammonia. Fluorine. Sulfur compounds.

7.3. Specific End Use(s)

For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

Silver (7440-22-4)		
EU	IOELV TWA (Legal Basis:2019/1831 EU in accor. with 98/24/EC)	0,1 mg/m³

Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	0,1 mg/m³ (inhalable fraction)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	0,1 mg/m³ (inhalable fraction)
Austria	OEL Ceiling (Legal Basis:BGBl. II Nr. 254/2018)	0,1 mg/m³ (inhalable fraction)
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	0,1 mg/m³
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	0,1 mg/m³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	0,1 mg/m³
Cyprus	OEL TWA (Legal Basis:KDP 16/2019)	0,1 mg/m³
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	0,1 mg/m³ (respirable fraction of aerosol)
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,01 mg/m³ (dust and powder)
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	0,1 mg/m³
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	0,1 mg/m³
France	OEL TWA (Legal Basis:INRS ED 984)	0,1 mg/m³ (indicative limit)
Germany	OEL TWA (Legal Basis:TRGS 900)	0,1 mg/m³ (inhalable fraction)
Greece	OEL TWA (Legal Basis:PWHSE)	0,1 mg/m³
Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	0,1 mg/m³
Ireland	OEL TWA (Legal Basis:2020 COP)	0,1 mg/m³ (metallic)
Ireland	OEL STEL (Legal Basis:2020 COP)	0,3 mg/m³ (calculated)
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	0,1 mg/m³ (dust and fume)
Italy	OEL TWA (Legal Basis:Decree 81)	0,1 mg/m³
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	0,1 mg/m³
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	0,1 mg/m³
Luxembourg	OEL TWA (Legal Basis:A-N 684)	0,1 mg/m³
Malta	OEL TWA (Legal Basis:MOHSAA Ch. 424)	0,1 mg/m³ (metallic)
Netherlands	OEL TWA (Legal Basis:OWCRLV)	0,1 mg/m³ (metallic)
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	0,1 mg/m³ (metal dust and fume)
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	0,3 mg/m³ (value calculated-metal dust and fume)
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	0,05 mg/m³ (inhalable fraction)
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	0,01 mg/m³ (indicative limit value)
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	0,1 mg/m³ (metallic)
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	0,1 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	0,01 mg/m³ (inhalable fraction)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	0,02 mg/m³ (inhalable fraction)
Spain	OEL TWA (Legal Basis:OELCAIS)	0,1 mg/m³ (indicative limit value)
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	0,1 mg/m³ (total dust)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	0,8 mg/m³ (inhalable dust)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	0,1 mg/m³ (inhalable dust)
Nickel (7440-02-0)		
Austria	TRK OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	0,5 mg/m³ (dust, inhalable fraction)
Austria	OEL Chemical Category (Legal Basis:BGBl. II Nr. 254/2018)	Group A1 Carcinogen dust, Respiratory sensitizer dust, Skin sensitizer
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	1 mg/m³
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	0,05 mg/m³
Bulgaria	OEL BLV (Legal Basis:Reg. No. 13/10)	45 µg/l Parameter: Nickel - Medium: urine - Sampling time: after several work shifts
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	0,5 mg/m³
Croatia	OEL BLV (Legal Basis:OG No. 91/2018)	10 µg/l Parameter: Nickel - Medium: plasma - Sampling time: at the end of the work shift 8 µg/g creatinine Parameter: Nickel - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine)
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	0,5 mg/m³ (respirable fraction of aerosol)
Czech Republic	OEL Chemical Category (Legal Basis:Decree No. 107/2013)	Sensitizer
Czech Republic	OEL BLV (Legal Basis:Reg. 41/2020)	0,077 µmol/mmol Creatinine Parameter: Nickel - Medium: urine - Sampling time: discretionary 0,04 mg/g creatinine Parameter: Nickel - Medium: urine - Sampling time: discretionary
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,05 mg/m³ (dust and powder)
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	0,5 mg/m³

Estonia	OEL Chemical Category (Legal Basis:Regulation No. 105)	Sensitizer
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	0,01 mg/m³ (respirable dust)
Finland	OEL BLV (Legal Basis:HTP-ARVOT 2020)	0,1 µmol/l Parameter: Nickel - Medium: urine - Sampling time: after the shift after a working week or exposure period
France	OEL TWA (Legal Basis:INRS ED 984)	1 mg/m³ 1 mg/m³ (metal gratings)
France	OEL Chemical Category (Legal Basis:INRS ED 984)	Carcinogen category 2
Germany	OEL TWA (Legal Basis:TRGS 900)	0,006 mg/m³
Germany	OEL Chemical Category (Legal Basis:TRGS 900)	Skin sensitization
Greece	OEL TWA (Legal Basis:PWHSE)	1 mg/m³
Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	0,01 mg/m³
Hungary	OEL Chemical Category (Legal Basis:Decree No. 05/2020)	Sensitizer, Carc. 1B - Presumed Carcinogen
Ireland	OEL TWA (Legal Basis:2020 COP)	0,5 mg/m³
Ireland	OEL STEL (Legal Basis:2020 COP)	1,5 mg/m³ (calculated)
Ireland	OEL Chemical Category (Legal Basis:Decree No. 05/2020)	Sensitizer
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	1,5 mg/m³ (inhalable particulate matter)
USA ACGIH	BEI Value (Legal Basis:IMDFN1)	5 µg/l Parameter: Nickel - Medium: urine - Sampling time: post-shift at end of workweek (background)
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	0,05 mg/m³
Latvia	OEL BLV (Legal Basis:Reg. No. 325)	3 µg/l Parameter: Nickel - Medium: urine
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	0,5 mg/m³
Lithuania	OEL Chemical Category (Legal Basis:HN 23:2011)	Sensitizer, Carcinogen
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	0,05 mg/m³
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	0,15 mg/m³ (value calculated)
Norway	OEL Chemical Category (Legal Basis:FOR-2020-04-06-695)	Carcinogen, Potential reproductive hazard, Allergenic substance
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	0,25 mg/m³
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	1,5 mg/m³ (inhalable fraction)
Portugal	OEL Chemical Category (Legal Basis:Portuguese Norm NP 1796:2014)	A5 - Not Suspected as a Human Carcinogen
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	0,1 mg/m³
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	0,5 mg/m³
Romania	OEL Chemical Category (Legal Basis:Gov. Dec. No 1.218)	C2
Romania	OEL BLV (Legal Basis:Gov. Dec. No 1.218)	3 µg/l Parameter: Nickel - Medium: urine - Sampling time: end of shift (SCOEL)
Slovakia	OEL BLV (Legal Basis:Gov. Decree 33/2018)	0,03 mg/l Parameter: Nickel - Medium: blood - Sampling time: end of exposure or work shift
Slovenia	OEL TWA (Legal Basis:No. 79/19)	0,006 mg/m³ (respirable fraction)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	0,048 mg/m³ (respirable fraction)
Slovenia	OEL Chemical Category (Legal Basis:No. 79/19)	Category 2
Spain	OEL TWA (Legal Basis:OELCAIS)	1 mg/m³ (manufacturing, commercialization and use restrictions according to REACH)
Spain	OEL Chemical Category (Legal Basis:OELCAIS)	Sensitizer
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	0,5 mg/m³ (total dust)
Sweden	OEL Chemical Category (Legal Basis:AFS 2018:1)	Sensitizer
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	0,5 mg/m³ (inhalable dust)
Switzerland	OEL Chemical Category (Legal Basis:OLVSNAIF)	Sensitizer, Category C2 carcinogen
Switzerland	OEL BLV (Legal Basis:OLVSNAIF)	45 µg/l Parameter: Nickel - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures)

8.2. Exposure Controls

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Suitable eye/body wash equipment should be available in the vicinity of any potential exposure.

Personal Protective Equipment	Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.

Materials for Protective Clothing	Chemically resistant materials and fabrics.
Hand Protection	Wear protective gloves.
Eye Protection	Chemical safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Respiratory Protection	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 PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Colour, Appearance	Tan paste
Odour	Odourless
Odour Threshold	No data available
pH	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	No data available
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	> 1 (water = 1)
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidising Properties	No data available
Explosive Limits	No data available
Particle Aspect Ratio	Not applicable
Particle Aggregation State	Not applicable
Particle Agglomeration State	Not applicable
Particle Specific Surface Area	Not applicable
Particle Dustiness	Not applicable

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, and incompatible materials.

10.5. Incompatible Materials
Strong acids, strong bases, strong oxidizers. Organic solvents. Hydrogen. Ammonia. Fluorine. Sulfur compounds.

10.6. Hazardous Decomposition Products
Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation. Nickel carbonyl gas.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (EC) No 1272/2008

Likely Routes of Exposure	Dermal; Eye contact; Ingestion
Acute Toxicity (Oral)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation)	Not classified (Based on available data, the classification criteria are not met)

Silver (7440-22-4)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 5,16 mg/l/4h

Nickel (7440-02-0)	
LD50 Oral Rat	> 9000 mg/kg
LC50 Inhalation Rat	> 10,2 mg/l (Exposure time: 1 h)

Skin Corrosion/Irritation	Not classified (Based on available data, the classification criteria are not met)
Eye Damage/Irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or Skin Sensitization	May cause an allergic skin reaction.
Germ Cell Mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified. (The nickel in this product is non-respirable. Carcinogencity hazards do not apply.)

Nickel (7440-02-0)	
IARC Group	2B
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.

Reproductive Toxicity	Not classified (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Single Exposure)	Not classified (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Repeated Exposure)	Not classified. (The nickel in this product is non-respirable. Specific target organ hazards do not apply.)
Aspiration Hazard	Not classified (Based on available data, the classification criteria are not met)
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	May cause an allergic skin reaction.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	None expected under normal conditions of use.

11.2. Information On Other Hazards

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short-Term (Acute)	Very toxic to aquatic life.
Hazardous To The Aquatic Environment, Long-Term (Chronic)	Harmful to aquatic life with long lasting effects.

Silver (7440-22-4)	
LC50 - Fish [1]	0,00155 – 0,00293 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea	0,00024 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 - Fish [2]	0,0062 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
NOEC - Chronic Fish	390 ng/l (Exposure time: 28d - Species: Pimephales promelas)

Nickel (7440-02-0)	
LC50 - Fish [1]	100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 - Crustacea [1]	121,6 µg/l (Exposure time: 48h - Species: Ceriodaphnia dubia [static])
LC50 - Fish [2]	15,3 mg/l
EC50 - Crustacea [2]	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 - Other Aquatic Organisms	0,174 – 0,311 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and Degradability

CV-2646 Part A	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV-2646 Part A	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Does not contain any PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XVIII

12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects

Other Information	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

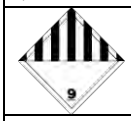
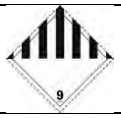
13.1. Waste Treatment Methods

Product/Packaging Disposal Recommendations	Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations. Material should be recycled if possible.
Ecology - Waste Materials	This material is hazardous to the aquatic environment. Keep out of sewers and waterways. 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

ADR	IMDG	IATA	ADN	RID
14.1. UN Number or ID Number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN Proper Shipping Name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel)	Environmentally hazardous substance, liquid, n.o.s. (Nickel)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel)
14.3. Transport Hazard Class				
9	9	9	9	9
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environmental Hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

14.6. Special Precautions For User

No additional information available

14.7. Maritime Transport in Bulk According to IMO instruments

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

15.1.1.1. REACH Annex XVII Information

Contains no REACH substances with Annex XVII restrictions

15.1.1.2. REACH Candidate List Information

Contains no substance on the REACH candidate list

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.1.5. REACH Annex XIV Information

Contains no REACH Annex XIV substances

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information

No additional information available

15.1.1.7. EC Inventory Information

No additional information available

15.1.1.8. Other Information

No additional information available

15.1.2. National Regulations

No additional information available

15.1.3. International Inventory Lists

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision	15/03/2023
Data Sources	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.
Other Information	According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1

Classification and Procedure Used to Derive the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	Calculation method
Aquatic Acute 1	Calculation method
Aquatic Chronic 3	Calculation method

Indication of Changes

Section	Change	Date Changed	Version
1	Language modified	21/10/2014	2.0
1	Language modified	12/02/2016	3.0
1	Language modified	27/06/2019	4.0
1	Language modified	15/03/2023	5.0
2	Classification modified; Language modified	21/10/2014	2.0
2	Classification modified; Language modified	12/02/2016	3.0
2	Classification modified; Language modified	27/06/2019	4.0
2	Language modified	15/03/2023	5.0
3	Data modified; Language modified	21/10/2014	2.0
3	Data modified; Language modified	12/02/2016	3.0
3	Data modified; Language modified	27/06/2019	4.0
3	Data modified; Language modified	15/03/2023	5.0
4	Language modified	21/10/2014	2.0
4	Language modified	12/02/2016	3.0
4	Language modified	27/06/2019	4.0
5	Language modified	21/10/2014	2.0
5	Language modified	27/06/2019	4.0
5	Language modified	15/03/2023	5.0
6	Language modified	21/10/2014	2.0
6	Language modified	12/02/2016	3.0
6	Language modified	27/06/2019	4.0
6	Language modified	15/03/2023	5.0
7	Language modified	21/10/2014	2.0
7	Language modified	12/02/2016	3.0
7	Language modified	27/06/2019	4.0
7	Language modified	15/03/2023	5.0
8	Data modified	21/10/2014	2.0
8	Data modified; Language modified	12/02/2016	3.0
8	Data modified; Language modified	27/06/2019	4.0
8	Data modified; Language modified	15/03/2023	5.0
9	Data modified	12/02/2016	3.0
9	Data modified	27/06/2019	4.0
9	Data modified	15/03/2023	5.0
10	Language modified	21/10/2014	2.0
10	Language modified	12/02/2016	3.0
10	Language modified	27/06/2019	4.0
10	Language modified	15/03/2023	5.0
11	Language modified	21/10/2014	2.0
11	Language modified	12/02/2016	3.0
11	Data modified; Language modified	27/06/2019	4.0
11	Data modified; Language modified	15/03/2023	5.0
12	Data modified	21/10/2014	2.0
12	Data modified	27/06/2019	4.0
12	Data modified; Language modified	15/03/2023	5.0
13	Language modified	12/02/2016	3.0
13	Language modified	27/06/2019	4.0
13	Language modified	15/03/2023	5.0
14	Classification modified	12/02/2016	3.0
14	Classification modified	27/06/2019	4.0
15	Language modified	21/10/2014	2.0
15	Language modified	12/02/2016	3.0
15	Language modified	27/06/2019	4.0
15	Language modified	15/03/2023	5.0
16	Language modified	21/10/2014	2.0

16	Language modified	12/02/2016	3.0
16	Language modified	27/06/2019	4.0
16	Language modified	15/03/2023	5.0

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
ErC50 - EC50 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 two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution
NDS - Najwyzsze Dopuszczalne Stezenie
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
STOT - Specific Target Organ Toxicity
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
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 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 - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendements

EU - 2019/1831 EU in accor. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.
EU - 2019/1243/EU, and 98/24/EC) - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.
Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBL. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.
Austria - BLV BGBl. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly
Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.
Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents
Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1
Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020
Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1)
Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with

changed through BGBl. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 -
Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

Cyprus - KDP 16/2019 - Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 - Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 - Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006.

Czech Republic - Reg. 41/2020 - Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended

Czech Republic - Decree No. 107/2013 - Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit values for the parameters of biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents

Denmark - BEK No. 698 of 28/05/2020 - Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 - Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020

Estonia - Regulation No. 105 - Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020.

Finland - HTP-ARVOT 2020 - Concentrations Known to be Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.

France - INRS ED 984 - Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.

France - Decree 2009-1570 - Decree 2009-1570 of December 15, 2009, relative to the control of chemical risk on workplaces.

Germany - TRGS 900 - Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020

Germany - TRGS 903 - Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020

Gibraltar - LN. 2018/131 - Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181.

Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

Luxembourg - A-N 684 - Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

Malta - MOSHAA Ch. 424 - Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198, and 57.

Netherlands- OWCRLV - Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

Norway - FOR-2020-04-060695 - Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353.

Poland - Dz. U. 2020 Nr. 61 - Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 - List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.

Portugal - Portuguese Norm NP 1796:2014 - Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020.

Romania - Gov. Dec. No 1.218 - Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.

Slovakia - Gov. Decree 33/2018 - Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents

Slovenia - No. 79/19 - Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001 . Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19

Spain - AFS 2018:1 - NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019

Sweden - AFS 2018:1 - Statute Book of the Swedish Work Environment Authority, AFS 2018:1
The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values

Switzerland - OLVSNAIF - Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

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") EXPRESSLY DISCLAIMS 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.

Nusil EU GHS SDS (2020/878)

Version uploaded 21/03/2023

CV-2646 Part B

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Revision date: 15/03/2023 Date of Issue: 25/07/2013 Version: 4.0

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

1.1. Product Identifier

Product Form	Mixture
Product Name	CV-2646 Part B
Synonyms	Curing Agent

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 For professional use only

1.2.2. Uses Advised Against

Uses Advised Against No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology Europe
1198 Avenue Maurice Donat
Le Natura Bt. 2
06250 Mougins
France
+33 4 92 96 93 31
productstewardship@avantorsciencesgcc.com
www.nusil.com

1.4. Emergency Telephone Number

Emergency Number +1 703-527-3887 CHEMTREC (International and Maritime)
800-424-9300 CHEMTREC (in US)
+(44)-870-8200418
+(353)-19014670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
Muta. 2	H341
Repr. 1B	H360FD
STOT SE 1	H370
STOT RE 1	H372
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of hazard classes, H-statements: see section 16

2.2. Label Elements

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

Hazard Pictograms (CLP)

GHS05 GHS07 GHS08 GHS09

Signal Word (CLP)	Danger
Hazard Statements (CLP)	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H341 - Suspected of causing genetic defects. H360FD - May damage fertility. May damage the unborn child. H370 - Causes damage to organs (thymus). H372 - Causes damage to organs (liver, thymus) through prolonged or repeated exposure. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary Statements (CLP)	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe mist, spray, vapours. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves. 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. Continue rinsing. P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor. P310 - Immediately call a POISON CENTER or doctor. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

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

This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) at a concentration equal to or greater than 0,1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
Dibutyltin dilaurate	(CAS-No.) 77-58-7 (EC-No.) 201-039-8 (EC Index-No.) 050-030-00-3	10-30	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360FD STOT SE 1, H370 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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 where possible).
First-Aid Measures After Inhalation	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-Aid Measures After Skin Contact	Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists. If exposed or concerned: Get medical advice/attention.
First-Aid Measures After Eye Contact	Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-Aid Measures After Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects	Skin sensitisation. Causes skin irritation. Causes eye irritation. Causes serious eye damage. Causes damage to organs (thymus). Causes damage to organs (liver, respiratory system) through prolonged or repeated exposure. May damage fertility. May damage the unborn child. Suspected of causing genetic defects.
Symptoms/Effects After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Effects After Skin Contact	Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.
Symptoms/Effects After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Effects After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Causes damage to organs (liver, thymus) through prolonged or repeated exposure. May damage fertility or the unborn child. Suspected of causing genetic defects.

4.3. Indication of Any Immediate 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 (CO_2), 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. 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.
Hazardous Combustion Products	Carbon oxides (CO, CO_2). Oxides of tin.

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	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Do not breathe vapour, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate 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 recognise 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. Avoid release to the environment. Collect spillage.

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. Absorb and/or contain spill with inert material. 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	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapours. Do not get in eyes, on skin, or on clothing. 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 Storage, Including Any Incompatibilities

Technical Measures	Comply with applicable regulations.
Storage Conditions	Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.
Incompatible Materials	Strong acids, strong bases, strong oxidisers.

7.3. Specific End Use(S)

For professional use only

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

Tin organic compounds		
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	0,1 mg/m³ (except tri-n-Butyltin compounds-inhalable fraction)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	0,2 mg/m³ (except Tri-n-butyltin compounds-inhalable fraction)
Austria	OEL Chemical Category (Legal Basis:BGBl. II Nr. 254/2018)	Skin notation except Tri-n-butyltin compounds
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	0,1 mg/m³
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	0,2 mg/m³
Belgium	OEL Chemical Category (Legal Basis:Royal Decree 21/01/2020)	Skin
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	0,1 mg/m³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	0,1 mg/m³ (except Cyhexatin)
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	0,2 mg/m³ (except Cyhexatin)
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	0,1 mg/m³
Czech Republic	OEL Chemical Category (Legal Basis:Decree No. 107/2013)	Potential for cutaneous absorption
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	0,1 mg/m³ (except Tri-n-butyltin compounds)
Denmark	OEL Chemical Category (Legal Basis:BEK No. 698 of 28/05/2020)	Potential for cutaneous absorption
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	0,1 mg/m³
Estonia	OEL STEL (Legal Basis:Regulation No. 105)	0,2 mg/m³
Estonia	OEL Chemical Category (Legal Basis:Regulation No. 105)	Skin notation
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	0,1 mg/m³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	0,3 mg/m³
Finland	OEL Chemical Category HTP-ARVOT 2020)	Potential for cutaneous absorption
France	OEL STEL (Legal Basis:INRS ED 984)	0,2 mg/m³
France	OEL TWA (Legal Basis:INRS ED 984)	0,1 mg/m³
Greece	OEL TWA (Legal Basis:PWHSE)	0,1 mg/m³
Greece	OEL STEL (Legal Basis:PWHSE)	0,2 mg/m³
Greece	OEL Chemical Category (Legal Basis:PWHSE)	skin - potential for cutaneous absorption

Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	0,02 mg/m³
Hungary	OEL Chemical Category (Legal Basis:Decree No. 05/2020)	Potential for cutaneous absorption
Ireland	OEL TWA (Legal Basis:2020 COP)	0,1 mg/m³
Ireland	OEL STEL (Legal Basis:2020 COP)	0,2 mg/m³
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	0,1 mg/m³
USA ACGIH	OEL STEL (Legal Basis:IMDFN1)	0,2 mg/m³
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	0,1 mg/m³
Lithuania	OEL STEL (Legal Basis:HN 23:2011)	0,2 mg/m³
Lithuania	OEL Chemical Category (Legal Basis:HN 23:2011)	Skin notation
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	0,1 mg/m³
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	0,3 mg/m³ (value calculated)
Norway	OEL Chemical Category (Legal Basis:FOR-2020-04-06-695)	Skin notation
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	0,1 mg/m³
Portugal	OEL STEL (Legal Basis:Portuguese Norm NP 1796:2014)	0,2 mg/m³
Portugal	OEL Chemical Category (Legal Basis:Portuguese Norm NP 1796:2014)	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	0,05 mg/m³
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	0,15 mg/m³
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	0,1 mg/m³
Slovakia	OEL STEL (Legal Basis:Gov. Decree 33/2018)	0,2 mg/m³
Slovakia	OEL Chemical Category (Legal Basis:Gov. Decree 33/2018)	Potential for cutaneous absorption
Spain	OEL TWA (Legal Basis:OELCAIS)	0,1 mg/m³
Spain	OEL STEL (Legal Basis:OELCAIS)	0,2 mg/m³
Spain	OEL Chemical Category (Legal Basis:OELCAIS)	skin - potential for cutaneous absorption
Sweden	OEL TLV (Legal Basis:AFS 2018:1)	0,1 mg/m³ (total dust)
Sweden	OEL STEL (Legal Basis:AFS 2018:1)	0,2 mg/m³ (total dust)
Sweden	OEL Chemical Category (Legal Basis:AFS 2018:1)	Skin notation
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	0,2 mg/m³ (inhalable dust)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	0,1 mg/m³ (inhalable dust)
Switzerland	OEL Chemical Category (Legal Basis:OLVSNAIF)	Skin notation

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate 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. Insufficient ventilation: wear respiratory protection. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: 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 PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Colour, Appearance	Translucent yellow
Odour	Slight
Odour Threshold	No data available
pH	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
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability	Not applicable
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	< 1
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity, Dynamic	No data available
Explosive Properties	Not explosive
Oxidising Properties	Not oxidising
Explosive Limits	No data available
Particle Aspect Ratio	Not applicable
Particle Aggregation State	Not applicable
Particle Agglomeration State	Not applicable
Particle Specific Surface Area	Not applicable
Particle Dustiness	Not applicable

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, and incompatible materials.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidisers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO_2). Oxides of tin.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (EC) No 1272/2008

Likely Routes of Exposure	Dermal; Eye contact; Ingestion; Inhalation
Acute Toxicity (Oral)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation)	Not classified (Based on available data, the classification criteria are not met)

Dibutyltin dilaurate (77-58-7)	
LD50 Oral Rat	2071 mg/kg
LD50 Dermal Rat	> 2 g/kg

Skin Corrosion/Irritation	Causes skin irritation.
Eye Damage/Irritation	Causes serious eye damage.
Respiratory or Skin Sensitization	May cause an allergic skin reaction.
Germ Cell Mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive Toxicity	May damage fertility. May damage the unborn child.
Specific Target Organ Toxicity (Single Exposure)	Causes damage to organs (thymus).
Specific Target Organ Toxicity (Repeated Exposure)	Causes damage to organs (liver, thymus) through prolonged or repeated exposure.
Aspiration Hazard	Not classified (Based on available data, the classification criteria are not met)
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.
Symptoms/Injuries After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Causes damage to organs (liver, thymus) through prolonged or repeated exposure. May damage fertility or the unborn child. Suspected of causing genetic defects.

11.2. Information On Other Hazards

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short-Term (Acute)	Very toxic to aquatic life.
Hazardous To The Aquatic Environment, Long-Term (Chronic)	Very toxic to aquatic life with long lasting effects.

Dibutyltin dilaurate (77-58-7)	
EC50 - Crustacea	0,463 mg/l (Daphnia magna)

12.2. Persistence and Degradability

CV-2646 Part B (77-58-7)	
Persistence and Degradability	Not readily biodegradable. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV-2646 Part B (77-58-7)	
Partition coefficient n-octanol/water (Log POW)	4,44 (OECD Guideline 107)
Bioaccumulative Potential	Not expected to bioaccumulate.

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Does not contain any PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XVIII

12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

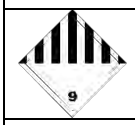
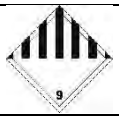
Product/Packaging Disposal Recommendations	Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.
Ecology - Waste Materials	This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Avoid release 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

ADR	IMDG	IATA	ADN	RID
14.1. UN Number or ID Number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN Proper Shipping Name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyltin dilaurate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyltin dilaurate)	Environmentally hazardous substance, liquid, n.o.s. (Dibutyltin dilaurate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyltin dilaurate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyltin dilaurate)
14.3. Transport Hazard Class				
9	9	9	9	9

ADR	IMDG	IATA	ADN	RID
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environmental Hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

14.6. Special Precautions For User
No additional information available

14.7. Maritime Transport in Bulk According to IMO instruments
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

15.1.1.1. REACH Annex XVII Information
No REACH Annex XVII restrictions

15.1.1.2. REACH Candidate List Information
CV-2646 Part B is not on the REACH Candidate List

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information
CV-2646 Part B is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information
Dibutyltin compounds are subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

15.1.1.5. REACH Annex XIV Information
CV-2646 Part B is not on the REACH Annex XIV List

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information
No additional information available

15.1.1.7. EC Inventory Information

Dibutyltin dilaurate (77-58-7)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.1.8. Other Information
No additional information available

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

Date of Preparation or Latest Revision	15/03/2023
Data Sources	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.
Other Information	According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 1	Specific target organ toxicity — single exposure, Category 1

Classification and Procedure Used to Derive the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	Calculation method
Eye Dam. 1	Calculation method
Skin Sens. 1	Calculation method
Muta. 2	Calculation method
Repr. 1B	Calculation method
STOT SE 1	Calculation method
STOT RE 1	Calculation method
Aquatic Acute 1	Calculation method
Aquatic Chronic 1	Calculation method

Indication of Changes

No additional information available

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
NDS - Najwyzsze Dopuszczalne Stezenie
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

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
ErC50 - EC50 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 two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution
STEL - Short Term Exposure Limit
STOT - Specific Target Organ Toxicity
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
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 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 - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendements

EU - 2019/1831 EU in accor. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.

EU - 2019/1243/EU, and 98/24/EC) - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.

Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBL. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.

Austria - BLV BGBl. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBl. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 -
Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

Cyprus - KDP 16/2019 - Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working

Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.

Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents

Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1

Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020

Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1)

Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

Luxembourg - A-N 684 - Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

Malta - MOSHAA Ch. 424 - Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198, and 57.

Netherlands- OWCRLV - Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

Norway - FOR-2020-04-060695 - Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353.

Poland - Dz. U. 2020 Nr. 61 - Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable

Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 - Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 - Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006.
Czech Republic - Reg. 41/2020 - Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended
Czech Republic - Decree No. 107/2013 - Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit values for the parameters of biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents
Denmark - BEK No. 698 of 28/05/2020 - Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 - Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020
Estonia - Regulation No. 105 - Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020.
Finland - HTP-ARVOT 2020 - Concentrations Known to be Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.
France - INRS ED 984 - Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.
France - Decree 2009-1570 - Decree 2009-1570 of December 15, 2009, relative to the control of chemical risk on workplaces.
Germany - TRGS 900 - Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020
Germany - TRGS 903 - Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020
Gibraltar - LN. 2018/131 - Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181.
Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 - List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.
Portugal - Portuguese Norm NP 1796:2014 - Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020.
Romania - Gov. Dec. No 1.218 - Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.
Slovakia - Gov. Decree 33/2018 - Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents
Slovenia - No. 79/19 - Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001 . Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19
Spain - AFS 2018:1 - NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019
Sweden - AFS 2018:1 - Statute Book of the Swedish Work Environment Authority, AFS 2018:1
The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values
Switzerland - OLVSNAIF - Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

Nusil EU GHS SDS (2020/878)

Version uploaded 21/03/2023

Polymer Systems Technology Limited

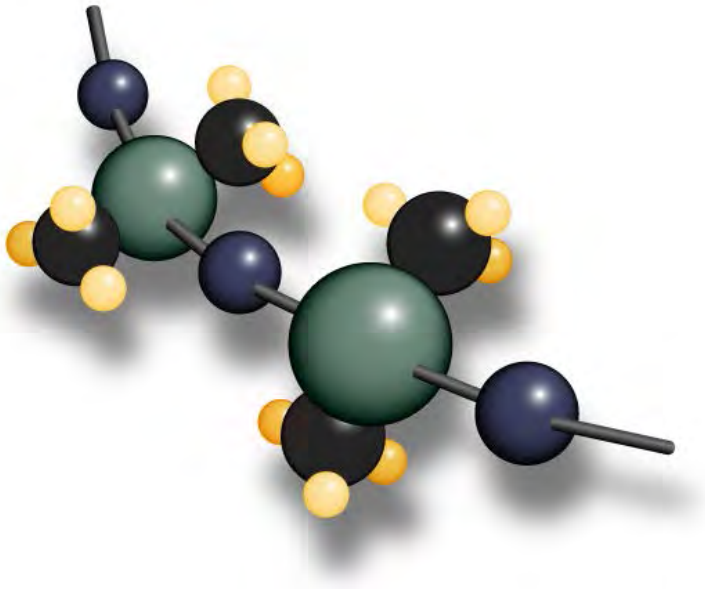
Silicone Sales & Services
UK - Ireland - Benelux

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



Version uploaded 21/03/2023