

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 24/09/2018 Date of issue: 07/01/2014

Version: 3.0

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

1.1. Product Identifier

Product form Mixture
Product Name CAT-102
Synonyms Peroxide Catalyst 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 To vulcanize silicone elastomer systems. For professional use only.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

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

1.4. Emergency Telephone Number

Emergency 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]

Org. Perox. D H242
Skin Sens. 1 H317
Repr. 1B H360

Full text of hazard classes and H-statements : see section 1.6

2.2. Label Elements

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

Hazard Pictograms (CLP)



Signal Word (CLP)

Danger

Hazardous Ingredients

2,4-Dichlorobenzoyl peroxide

Hazard Statements (CLP)

H242 - Heating may cause a fire.

H317 - May cause an allergic skin reaction.

H360 - May damage fertility or the unborn child.

Precautionary Statements (CLP)

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been

CAT-102

Safety Data Sheet

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

read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P234 - Keep only in original packaging.

P240 - Ground and bond container and receiving equipment.

P261 - Avoid breathing vapours, mist, spray

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of water

P308+P313 - If exposed or concerned: Get medical advice/attention

P321 - Specific treatment (see Section 4 on this SDS)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish

P403+P411 - Store in a well-ventilated place. Store at temperatures not exceeding 30°C/86°F.

P405 - Store locked up.

P410 - Protect from sunlight.

P420 - Store separately.

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 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]
2,4-Dichlorobenzoyl peroxide	(CAS-No.) 133-14-2 (EC-No.) 205-094-9	45 - 55	Org. Perox. D, H242 Skin Sens. 1, H317 Repr. 1B, H360

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).

CAT-102

Safety Data Sheet

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

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

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects	Skin sensitisation. May damage fertility. May damage the unborn child.
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	May damage fertility or the unborn child.

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	Heating may cause a fire.
Explosion Hazard	Peroxides and their decomposition products can be flammable, can ignite when heated, and explode under confinement. Will support combustion under fire conditions.
Reactivity	This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.
Hazardous Decomposition Products in Case of Fire	Carbon oxides (CO, CO ₂). Silicon oxides. Formaldehyde. PCB (polychlorinated biphenyls). Furan.

5.3. Advice for Firefighters

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
Firefighting Instructions	DO NOT fight fire when fire reaches explosives, evacuate area.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

CAT-102

Safety Data Sheet

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

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures

Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, and lighting equipment equipment.

Storage Conditions

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. Keep in fireproof place. Store locked up/in a secure area.

Incompatible Materials

Acids. Bases. Rust. Iron. Copper. Heavy metals. Reducing agents. Peroxides.

Storage Temperature

< 30 °C (86 °F)

Special Rules On Packaging

Keep only in original container.

7.3. Specific End Use(S)

To vulcanize silicone elastomer systems. For professional use only.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

No additional information available

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. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

Chemically resistant materials and fabrics. Wear fire/ flame resistant/retardant clothing.

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 Hazards

9.1. Information on Basic Physical and Chemical Properties

Physical State

Solid

Colour

White to off-white paste

Odour

Slight

Odour Threshold

No data available

CAT-102

Safety Data Sheet

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

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 (Solid, Gas)	No data available
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	1,25 (water = 1)
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity, Kinematic	No data available
Viscosity, Dynamic	No data available
Explosive Properties	Heating may cause a fire
Oxidising Properties	No data available
Explosive Limits	No data available

9.2. Other Information

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.

10.2. Chemical Stability

Heating may cause a fire.

10.3. Possibility Of Hazardous Reactions

Hazardous polymerization may occur.

10.4. Conditions To Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame, combustible materials, organic material and other sources of ignition.

10.5. Incompatible Materials

Acids. Bases. Rust. Iron. Copper. Heavy metals. Reducing agents. Peroxides.

10.6. Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (CO, CO₂). PCB (polychlorinated biphenyls). Furan. 2,4-Dichlorobenzoic acid. 1,3-dichlorobenzene. 2,2',4,4'-Tetrachlorobiphenyl.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity Not classified

2,4-Dichlorobenzoyl peroxide (133-14-2)	
LD50 Oral Rat	> 2500 mg/kg
Skin Corrosion/Irritation	Not classified
Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	May cause an allergic skin reaction.

CAT-102

Safety Data Sheet

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

Germ Cell Mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive Toxicity		May damage fertility or the unborn child.
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.

2,4-Dichlorobenzoyl peroxide (133-14-2)

LC50 Fish 1	> 1000 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
-------------	--

NOEC Chronic Fish	1000 mg/l (Exposure: 96h Species: Poecilia reticulata [semi-static])
-------------------	--

12.2. Persistence and Degradability

CAT-102

Persistence and Degradability	Not established.
-------------------------------	------------------

12.3. Bioaccumulative Potential

CAT-102

Bioaccumulative potential	Not established.
---------------------------	------------------

2,4-Dichlorobenzoyl peroxide (133-14-2)

Log Pow	6,01 KowWin
---------	-------------

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 Recommendations	Dispose of contents/container in accordance with local, 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 / AND

CAT-102

Safety Data Sheet

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

ADR	IMDG	IATA	ADN	RID
14.1. UN Number				
3106	3106	3106	3106	3106
14.2. UN Proper Shipping Name				
ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)	ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)	ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)	ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)	ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)
14.3. Transport Hazard Class(Es)				
5.2	5.2	5.2	5.2	5.2
				
14.4. Packing Group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental Hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

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

2,4-Dichlorobenzoyl peroxide (133-14-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial 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	Hazards identification	Modified	24/09/2018
3	Composition/information on ingredients	Modified	24/09/2018
4	First aid measures	Modified	24/09/2018

CAT-102

Safety Data Sheet

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

11	Toxicological information	Modified	24/09/2018
15	Regulatory information	Modified	24/09/2018

Date of Preparation or Latest Revision 24/09/2018

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) 2015/830

Full Text of H- and EUH-statements:

Org. Perox. D	Organic Peroxides, Type D
Repr. 1B	Reproductive toxicity, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.

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 - Najwyższe Dopuszczalne Stężenie
NDSCh - Najwyższe Dopuszczalne Stężenie Chwilowe
NDSP - Najwyższe Dopuszczalne Stężenie Pulpowe
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
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

Nusil EU GHS SDS

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.

CAT-102

Safety Data Sheet

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

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.