CAT-102

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 16

2.2. Label Elements

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

Hazard Pictograms (CLP)

GHS02 GHS07 GHS08

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

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).

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.

Other Information	Contains an organic peroxides keep away from incompatible materials.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep away from heat, hot surfaces, sparks, open flames, incompatible materials, combustible materials, and other ignition sources. No smoking.

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 recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment	Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Use only non-sparking tools.
Methods For Cleaning Up	Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Use only non-sparking tools. 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	This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.
Precautions for Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from heat, ignition sources, combustible materials, incompatible materials, direct sunlight. - No smoking. 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. 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

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, CO_2). PCB (polychlorinated biphenyls). Furan. 2,4-Dichlorobenzoic acid. 1,3-dichlorbenzene. 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.

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

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

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 - 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
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

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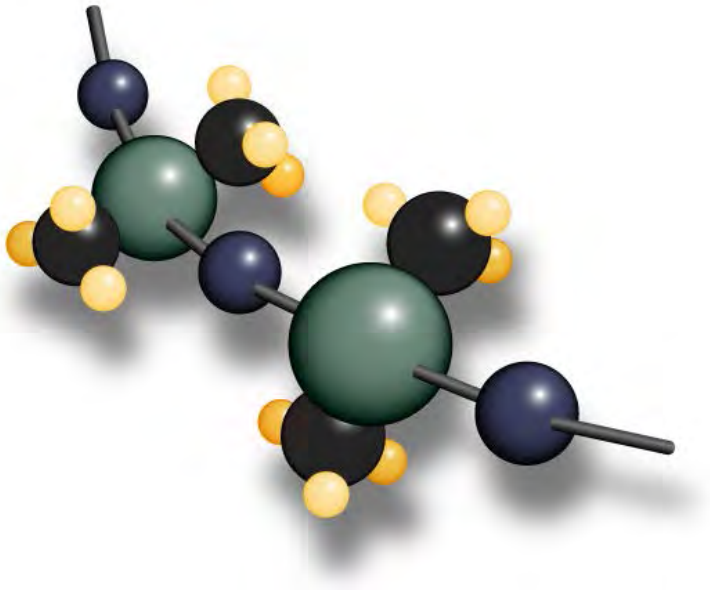

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