

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

SECTION 1. IDENTIFICATION

Product name : **Construction Silicone Sealant - Black**

Product code : 17013, 17014, 17015

Manufacturer or supplier's details

Company Identification : JIT Silicones Plus
5 Industrial Park Drive
Oakdale, PA 15071
UNITED STATES

Telephone : 855-548-7587

24-Hour Emergency Contact : Chemtrec +1 800-424-9300

Local Emergency Number : 800-424-9300

E-mail address : info@jitsiliconesplus.com

Recommended use of the chemical and restrictions on use

Recommended use : Adhesive, binding agents

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Precautionary Statements : **Prevention:**
P271 Use only outdoors or in a well-ventilated area.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Silicone elastomer

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 20 - < 30
Silicon dioxide	7631-86-9	>= 5 - < 10
Carbon black	1333-86-4	>= 0.1 - < 1

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

SECTION 4. FIRST AID MEASURES

- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.
Get medical attention if symptoms occur.
- In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : No special precautions are necessary for first aid responders.
- Notes to physician : Treat symptomatically and supportively.
-

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides
Silicon oxides
Formaldehyde
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

- Personal precautions, protective equipment and emergency procedures : Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.
-

SECTION 7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers. Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:
Strong oxidizing agents
-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated middle	64742-46-7	TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA (Mist)	5 mg/m ³	NIOSH REL

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
 Date of first issue: 11/30/2014

		ST (Mist)	10 mg/m ³	NIOSH REL
Silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m ³ / %SiO ₂ (Silica)	OSHA Z-3
		TWA	6 mg/m ³ (Silica)	NIOSH REL
Carbon black	1333-86-4	TWA	3.5 mg/m ³	NIOSH REL
		TWA	3.5 mg/m ³	OSHA Z-1
		TWA (Inhalable fraction)	3 mg/m ³	ACGIH

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

|| Silicon dioxide

|| Carbon black

Engineering measures : Processing may form hazardous compounds (see section 10).
 Ensure adequate ventilation, especially in confined areas.
 Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:
 Safety glasses

Skin and body protection : Skin should be washed after contact.

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0	Revision Date: 10/19/2017	SDS Number: 857648-00009	Date of last issue: 04/24/2017 Date of first issue: 11/30/2014
----------------	------------------------------	-----------------------------	---

When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.
These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	paste
Color	:	black
Odor	:	Acetic acid
Odor Threshold	:	No data available
pH	:	Not applicable
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Self-ignition	:	The substance or mixture is not classified as pyrophoric. The substance or mixture is not classified as self heating.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not applicable
Relative vapor density	:	No data available
Relative density	:	0.96
Solubility(ies) Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Viscosity
Viscosity, dynamic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Use at elevated temperatures may form highly hazardous compounds.
Can react with strong oxidizing agents.
Acetic acid is formed upon contact with water or humid air.
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition products

Thermal decomposition : Formaldehyde

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,266 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg
Assessment: The substance or mixture has no acute dermal

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

|| toxicity

Silicon dioxide:

|| Acute oral toxicity : LD50 (Rat): > 3,300 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Information taken from reference works and the literature.

|| Acute inhalation toxicity : LC50 (Rat): > 2.08 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Information taken from reference works and the literature.

|| Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Information taken from reference works and the literature.

Carbon black:

|| Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

|| Acute inhalation toxicity : LC50 (Rat): > 0.0046 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

|| Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

|| Species: Rabbit
|| Method: OECD Test Guideline 404
|| Result: No skin irritation

Silicon dioxide:

|| Result: No skin irritation
|| Remarks: Information taken from reference works and the literature.

Carbon black:

|| Species: Rabbit
|| Result: No skin irritation

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Serious eye damage/eye irritation

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Silicon dioxide:

Result: No eye irritation
Remarks: Information taken from reference works and the literature.

Carbon black:

Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

Test Type: Maximization Test
Routes of exposure: Skin contact
Species: Guinea pig
Result: negative
Remarks: Based on data from similar materials

Silicon dioxide:

Assessment: Does not cause skin sensitization.
Test Type: Skin: test type not specified
Species: Guinea pig
Result: negative
Remarks: Information taken from reference works and the literature.

Carbon black:

Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Rat
Application Route: Intraperitoneal injection
Result: negative

Silicon dioxide:

Genotoxicity in vitro : Result: negative
Remarks: Information taken from reference works and the literature.

Genotoxicity in vivo : Application Route: Ingestion
Result: negative
Remarks: Information taken from reference works and the literature.

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Carbon black:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Carcinogenicity

Not classified based on available information.

IARC Group 2B: Possibly carcinogenic to humans

Carbon black 1333-86-4

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated middle:

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

Carbon black:

Routes of exposure: inhalation (dust/mist/fume)
Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

Repeated dose toxicity

Ingredients:

Distillates (petroleum), hydrotreated middle:

Species: Rat
NOAEL: $\geq 5,000$ mg/kg
Application Route: Ingestion
Exposure time: 13 Weeks
Remarks: Based on data from similar materials

Carbon black:

Species: Rat
NOAEL: 1 mg/m³
LOAEL: 7 mg/m³
Application Route: Inhalation
Test atmosphere: dust/mist
Exposure time: 90 Days
Remarks: These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Ingredients:

Distillates (petroleum), hydrotreated middle:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Distillates (petroleum), hydrotreated middle:

Toxicity to fish	:	LL50 (Scophthalmus maximus (turbot)): > 1,028 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction
Toxicity to daphnia and other aquatic invertebrates	:	LL50 (Acartia tonsa): > 3,193 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction
Toxicity to algae	:	EL50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOELR (Ceriodaphnia dubia (water flea)): > 100 mg/l Exposure time: 8 d Test substance: Water Accommodated Fraction
Toxicity to microorganisms	:	EC50: > 100 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

Carbon black:

Toxicity to fish	:	LC0 (Danio rerio (zebra fish)): 1,000 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 5,600 mg/l Exposure time: 24 h Method: OECD Test Guideline 202
Toxicity to algae	:	NOEC (Desmodesmus subspicatus (green algae)): 10,000 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

Persistence and degradability

Ingredients:

Distillates (petroleum), hydrotreated middle:

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Biodegradability : Result: Readily biodegradable.
Biodegradation: 74 %
Exposure time: 28 d
Method: OECD Test Guideline 306

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version 4.0 Revision Date: 10/19/2017 SDS Number: 857648-00009 Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Acetic acid	64-19-7	5000	*
Acetic anhydride	108-24-7	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know

Dimethyl siloxane, hydroxy-terminated	70131-67-8
Distillates (petroleum), hydrotreated middle	64742-46-7
Silicon dioxide	7631-86-9
Acetic acid	64-19-7
Acetic anhydride	108-24-7

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California List of Hazardous Substances

Distillates (petroleum), hydrotreated middle	64742-46-7
--	------------

California Permissible Exposure Limits for Chemical Contaminants

Distillates (petroleum), hydrotreated middle	64742-46-7
Silicon dioxide	7631-86-9

The ingredients of this product are reported in the following inventories:

- REACH** : For purchases from Dow Chemical EU legal entities, all ingredients are currently pre/registered or exempt under REACH. Please refer to section 1 for recommended uses. For purchases from non-EU Dow Chemical legal entities with the intention to export into EEA please contact your DC representative/local office.
- TSCA** : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
- DSL** : All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version
4.0

Revision Date:
10/19/2017

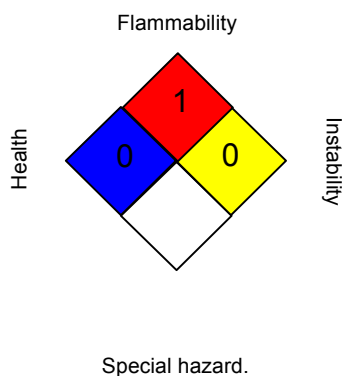
SDS Number:
857648-00009

Date of last issue: 04/24/2017
Date of first issue: 11/30/2014

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HEALTH	/	0
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Ko-

SAFETY DATA SHEET

Construction Silicone Sealant - Black

Version	Revision Date:	SDS Number:	Date of last issue: 04/24/2017
4.0	10/19/2017	857648-00009	Date of first issue: 11/30/2014

rea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 10/19/2017

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8