Version	Revision Date:	Print Date:	Date of last issue: 2024/04/08
1.3	2024/06/14	2024/06/18	Date of first issue: 2019/02/28

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : QSil 553 A

Recommended use of the chemical and restrictions on use

Recommended use : Electrical industry and electronics

Manufacturer or supplier's details

Manufacturer/Supplier

CHT Germany GmbH
Bismarckstraße 102
72072 Tübingen
Germany
Tel.: +49 7071 154 0
info@cht.com

CHT Switzerland AG
Kriessernstrasse 20
9462 Montlingen
Switzerland
Tel.: +41 71 763 88 11
info.switzerland@cht.com

Importer : -
-
-
-
-
-

Responsible Department : CHT Germany GmbH
CHT Switzerland AG
Product Safety
sds.germany@cht.com
sds.switzerland@cht.com

Emergency telephone number

Emergency telephone number : +1 703 527 3887 CHEMTREC (International, 24 hours)

2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical nature : Silicone elastomer

Components

Chemical name	CAS-No.	Classification according to UN GHS	Concentration (% w/w)
Quartz (SiO2)	14808-60-7	STOT RE 1; H372 (Lungs)	>= 50 - < 70

For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : In case of skin contact remove mechanically with cloth or paper.
Wash off immediately with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.
If symptoms persist, call a physician.

If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Call a physician immediately.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)
Water spray
Dry powder
Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Hazardous decomposition products formed under fire conditions.

Can be released in case of fire:
Carbon oxides
Silica

Specific extinguishing methods	:	In case of fire do not inhale smoke, conflagration gases and steams. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Contaminated surfaces will be extremely slippery.
Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil. Pay attention to local or official regulations.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly. Treat recovered material as described in the section "Disposal considerations". Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection. Keep away from heat and sources of ignition.
Advice on safe handling	:	Provide sufficient air exchange and/or exhaust in work rooms. Avoid formation of aerosol.
Conditions for safe storage	:	Do always store in containers which correspond to the original ones. Keep container tightly closed. Keep in a dry, cool place.
Further information on storage conditions	:	Protect from frost. Protect from humidity and keep away from water.
Materials to avoid	:	Incompatible with acids and bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Please check whether national workplace exposure limits exist for the dangerous ingredients listed in Section 3.

Engineering measures : Solids with occupational exposure limits in liquid preparations do not cause an exposure in the workplace, because they are not present in a respirable form. Exposure can occur in the form of aerosols or after drying of the liquid the solids remain, possibly in a finely dispersed form.
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection : In case the work place is not ventilated sufficiently and during spray processing, it is necessary to wear respiratory protective equipment.

Hand protection

Material	:	butyl-rubber
Break through time	:	> 480 min
Glove thickness	:	> 0.5 mm
Protective index	:	Class 6

Remarks : Wear chemical resistant impervious gloves. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : Goggles
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Skin and body protection : Wear suitable protective clothing.
Work uniform or laboratory coat.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Do not breathe vapours, aerosols.
Take off all contaminated clothing immediately.
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	paste
Colour	:	white
Odour	:	odourless
pH	:	Not applicable substance/mixture is non-soluble (in water)
Melting point/range	:	-40 °C
Boiling point/boiling range	:	> 100 °C
Flash point	:	> 100 °C
Evaporation rate	:	Not applicable
Flammability (liquids)	:	Sustains combustion
Self-ignition	:	not auto-flammable
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density	:	Not applicable
Density	:	1.63 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	not determined
Decomposition temperature	:	The substance or mixture is not classified self-reactive.
Viscosity		
Viscosity, dynamic	:	8,000 mPa.s (20 °C) Method: Brookfield

Viscosity, kinematic	:	not determined
Oxidizing properties	:	Not applicable
Conductivity	:	Not determined
Particle characteristics Particle Size Distribution	:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	:	No hazardous reactions known if stored an handled properly.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Protect from moisture.
Incompatible materials	:	Acids Bases
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	LD50(Rat): > 5,000 mg/kg Remarks: Argument by analogy
Acute inhalation toxicity	:	Remarks: Based on available data, the classification criteria are not met.
Acute dermal toxicity	:	Remarks: Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Remarks	:	Prolonged skin contact may cause skin irritation.

Serious eye damage/eye irritation

Product:

Remarks	:	Contact with eyes may cause irritation.

Respiratory or skin sensitisation

Product:

Remarks : No known sensitising effect.

Germ cell mutagenicity

Product:

Germ cell mutagenicity - Assessment : Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

Components:

Quartz (SiO2):

Carcinogenicity - Assessment : There is numerous evidence that an increased risk of lung cancer is limited to people who already have silicosis.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Remarks : Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Exposure routes : Inhalation
Target Organs : Lungs
Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Remarks : The product is liquid, there are no dust particles in respirable form.

Components:

Quartz (SiO2):

Exposure routes : inhalation (dust/mist/fume)
Target Organs : Lungs
Assessment : Causes damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Product:

Based on available data, the classification criteria are not met.

Experience with human exposure

Components:

Quartz (SiO2):

Inhalation : Remarks: Product can cause silicosis when high concentrations of dust are inhaled over a long time. Silicosis symptoms can be long-lasting cough attacks and shortness of breath. Work done in surroundings containing silica dust has to stay under observation.
There is numerous evidence that an increased risk of lung cancer is limited to people who already have silicosis.

Further information

Product:

Remarks : If used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data is available on the product itself.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data is available on the product itself.

Toxicity to algae/aquatic plants : Remarks: No data is available on the product itself.

Toxicity to microorganisms : Remarks: No data is available on the product itself.

Persistence and degradability

Product:

Biodegradability : Remarks: No data is available on the product itself.

Physico-chemical removability : Remarks: The product is insoluble and sinks in water. May be separated mechanically in waste water plants.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Mobility in soil

Product:

Mobility : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : According to our knowledge, the product does not contain heavy metals and other compounds of EC directive 2000/60 EC.
The product is insoluble in water, therefore the ecological data such as, e.g. biodegradability, COD, BOD5 values cannot be determined analytically.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Product that cannot be reused, reclaimed or recycled should be disposed of at an authorised facility in accordance with national, state and local regulations.

Contaminated packaging : Packaging must be completely emptied. Dispose of non-recyclable/recyclable packaging in accordance with local regulations.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good
Segregation group : -

Transport in bulk according to IMO instruments

Not applicable

Special precautions for user

Remarks : see chapter 6 - 8

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National and local regulations must be observed.

16. OTHER INFORMATION

Revision Date	:	2024/06/14
Date format	:	yyyy/mm/dd

Further information

Training advice	:	Based on the information in the safety data sheet and the workplace conditions, employees must be regularly trained in the safe handling of the product. National rules for training employees in handling hazardous substances must be observed.
Other information	:	The classification for dangerous physico-chemical properties, health and environmental hazards has been derived from a combination of computational methods and, if available, test data. This data sheet contains changes from the previous version in section(s): 3 11 12
Sources of key data used to compile the Safety Data Sheet	:	Information from our suppliers, as well as data from the "Registered substances database" of the European Chemicals Agency (ECHA) has been used to compile this safety data sheet.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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 - Korea 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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, Bioaccumu-

lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals 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; WHMIS - Workplace Hazardous Materials Information System

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.