

Safety Data Sheet

SABOSTAB® UV 94

SDS according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Safety Data Sheet dated 4/22/2021, version 2

1. IDENTIFICATION

Product identifier

Identification of the substance

Trade name: SABOSTAB® UV 94

CAS number: 71878-19-8

Other means of identification:

Trade code: D0000000000UV94

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses: Uses of substances as such or in preparations at industrial sites

Manufacture of fine chemicals

Formulation [mixing] of preparations and/or re-packaging

additive for industrial plastic manufacturing

Restrictions on use: This product is not intended for use as a direct additive in foods, drugs, cosmetics, pesticides, or in products for which prolonged contact with mucous membranes or abraded skin, or implantation within the human body is specifically intended.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company:

SABO SpA

Via Caravaggi

24040 Levate BG

ITALY

Sabo Spa

Tel +39 035 596000

fax +39 035 594400

8.00-18.00

Competent person responsible for the safety data sheet:

sds@sabo.com

Emergency phone number

Sabo Spa

Tel +39 035 596000

fax +39 035 594400

8.00-18.00

address of additional emergency medical services

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Label elements

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

Safety Data Sheet

SABOSTAB® UV 94

None

Hazards not otherwise classified identified during the classification process:

None

Ingredient(s) with unknown acute toxicity:

None.

Additional classification information

NFPA rating:



HMIS rating:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Identification of the substance

Chemical characterization: SABOSTAB® UV 94

Trade code: D0000000000UV94

Product type and use: Hindered Amine Light Stabilizer (HALS) for plastics

CAS number: 70624-18-9 or 71878-19-8

Chemical name: 1,6-Hexanediamine, N1,N6-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with 2,4,4-trimethyl-2-pentanamine

Synonym:

Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]-[(2,2,6,6-tetramethyl-4-piperidyl)imino]-hexamethylene-[(2,2,6,6-tetramethyl-4-piperidyl)imino]

Mixtures

N.A.

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Wash immediately with plenty of soap and water. Get medical attention if irritation or rash occurs

In case of eyes contact:

In case of contact with eyes, rinse immediately with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. Get medical attention if irritation occurs.

In case of Ingestion:

Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have person lean forward to reduce the risk of aspiration. Get medical attention immediately

In case of Inhalation:

Safety Data Sheet

SABOSTAB® UV 94

Remove to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration and get immediate medical attention. Get medical attention if respiratory irritation occurs or if person feels unwell.

Most important symptoms/effects, acute and delayed

Eyes	May cause eye irritation.
Inhalation	Dust is harmful if inhaled and may cause respiratory irritation.
Skin	May cause minor skin irritation.
Ingestion	May be harmful if large amounts are swallowed. Repeated or prolonged exposure to high doses by ingestion may cause effects on the liver, mesenteric lymph nodes, spleen, and blood based on animal data.

Indication of immediate medical attention and special treatment needed

Notes to Physician: Exposure may aggravate pre-existing conditions of the liver, mesenteric lymph nodes, spleen, and blood based on animal data.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.
Water.

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Explosion: This product is supplied in a non-dusting form. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Dust is also harmful by inhalation.

Burning produces heavy smoke, and may produce hazardous combustion products, including carbon monoxide, carbon dioxide, oxides of nitrogen, and other toxic gases. Dust is harmful by inhalation.

Hazardous combustion products:

Carbon monoxide

Explosive properties: not explosive

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Standard protective equipment for fighting chemical fires should be used, including self contained breathing apparatus (SCBA) and full fire fighting turn-out gear (full Bunker gear).

Caution: CO₂ used for extinguishing will displace air in confined spaces and may cause an oxygen deficient atmosphere.

Move undamaged containers from the immediate hazard area if it can be done safely.

Water used for extinguishing a fire must be prevented from draining into sewers or being released to the environment .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Avoid personal contact. Wear personal protective equipment (See Section 8: Exposure Controls / Personal Protection). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition and do not breathe dust.

This product is supplied in a non-dusting form. Any dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e. clearing dust surfaces with compressed air). Non-sparking tools should be used. Dust is also harmful if inhaled.

Safety Data Sheet

SABOSTAB® UV 94

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

For containment:

If dusts are present: Remove all sources of ignition and use explosion-proof equipment for cleanup that has been designed for use with combustible dusts.

7. HANDLING AND STORAGE

Precautions for safe handling

If there are dusts: do not breathe the vapors or fumes generated during the polymer processing operations and avoid contact with eyes and skin. Use only with adequate ventilation. Do not eat, drink or smoke while working

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Danger! Explosion hazard. Finely dispersed particles form explosive mixtures in air. Prevent deposition of dust; closed system, electrical equipment and lighting dust proof. Consult an expert.

Storage recommended at room temperature

Dust explosion class: ST class 2 - Kst value between 200 and 300 bar m/sec

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

Appropriate engineering controls:

Work in well ventilated areas. The use of local exhaust ventilation is recommended to control air contaminants. Provide mechanical ventilation for confined spaces. Use explosion-proof ventilation equipment. Use mechanical handling to reduce human contact with materials.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment if dusts are present.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment).

Use only appropriately classified electrical equipment and powered industrial trucks if dusts are present.

Individual protection measures

Eye protection:

Eye protection: Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6,

Safety Data Sheet

SABOSTAB® UV 94

corresponding > 480 minutes of permeation time according to EN 374)

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium /high

efficiency for solid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Granules,colorless to yellow
Odour:	Odourless
Odour threshold:	N.A.
pH:	6.5 ; 1 %(m), 20 - 25 °C
Melting point / freezing point:	100-135 °C
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	390 - 400°C
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	1.0 E-6 Pa
Flash point:	> 150 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	450-550g/l(bulk den)
Solubility in water:	<0.1 mg/l 20°C
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	2.44 (20-25°C)
Auto-ignition temperature:	350°C
Decomposition temperature:	500°C
Viscosity:	N.A.
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

10. STABILITY AND REACTIVITY

Reactivity

substances to avoid: strong oxidizing agent, strong bases, strong acids

Chemical stability

The product is stable if stored and handles as prescribed/indicate

Possibility of hazardous reactions

Conditions to avoid

May form flammable/explosive dust-air mixture. Avoid powder form in air.

substances to avoid: strong oxidizing agents, strong bases, strong acids

Incompatible materials

Strong oxidizing agents, strong reducing agents, strong acids, strong bases

Hazardous decomposition products

Burning may produce heavy smoke and hazardous combustion products, including carbon monoxide, carbon dioxide, oxides of nitrogen, and other toxic gases. Dust is harmful if inhaled and may form combustible mixtures with air

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the substance:

SABOSTAB® UV 94 - CAS: 71878-19-8

a) acute toxicity

Not classified

Safety Data Sheet

SABOSTAB® UV 94

Based on available data, the classification criteria are not met

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 3000 mg/kg

Note: This product is supplied in a non-dusting form. It is not classified as acutely toxic by inhalation based on the lack of sufficient biological availability of respirable particles in the form in which it is shipped by the manufacturer, under normal conditions of use, and/or during foreseeable emergencies. For questions and additional information, please contact SABO.

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

Test: Skin Irritant - Species: Rabbit Negative

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

Test: Eye Irritant - Species: Rabbit Negative

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

Test: Skin Sensitization - Species: Guinea pig Negative

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

Test: Mutagenesis Negative

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Substance(s) listed on the NTP report on Carcinogens:

No.

Substance(s) listed on the IARC Monographs:

None.

Substance(s) listed as OSHA Carcinogen(s):

No.

Substance(s) listed as NIOSH Carcinogen(s):

No.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

SABOSTAB® UV 94 - CAS: 71878-19-8

Not classified for environmental hazards

Based on available data, the classification criteria are not met

a) Aquatic acute toxicity:

Safety Data Sheet

SABOSTAB® UV 94

Endpoint: LC50 - Species: Fish > 72 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
c) Bacteria toxicity:
Endpoint: EC50 - Species: Activated Sludge > 100 mg/l - Duration h: 3
e) Plant toxicity:
Endpoint: EC50 - Species: Scenedesmus sp.(freshwater algae) > 100 mg/l - Duration h: 7
Persistence and degradability
SABOSTAB® UV 94 - CAS: 71878-19-8
Biodegradability: Non-readily biodegradable
Bioaccumulative potential
N.A.
Mobility in soil
N.A.
Other adverse effects
None

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

UN number

Not classified as dangerous in the meaning of transport regulations.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group

N.A.

Environmental hazards

Most important toxic component: SABOSTAB® UV 94

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

N.A.

Special precautions

N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

This substance is listed on the TSCA inventory.

TSCA listed substances: ACTIVE

SARA - Superfund Amendments and Reauthorization Act

Section 302 – Extremely Hazardous Substances: No.

Section 304 – Hazardous substances: No.

Section 313 – Toxic chemical list: No.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

No substances listed.

CAA - Clean Air Act

CAA listed substances:

None.

CWA - Clean Water Act

CWA listed substances:

Safety Data Sheet

SABOSTAB® UV 94

None.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

yes

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

No.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

No.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

No.

16. OTHER INFORMATION

Safety Data Sheet dated 4/22/2021, version 2

Sections modified from the previous revision:

3. COMPOSITION/INFORMATION ON INGREDIENTS

5. FIRE-FIGHTING MEASURES

15. REGULATORY INFORMATION

Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association

Safety Data Sheet

SABOSTAB® UV 94

NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average