Safety Data Sheet
S21 METAL

Safety Data Sheet dated 8/1/2022, version 2

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade code and name: S21 METAL

Recommended use of the chemical and restrictions on use

Recommended use:

Polyester filler for auto-body and nautical applications.

Restrictions on use:

Only for professional use.

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

Company:

Industria Chimica Reggiana I.C.R. Spa

(subject to management and coordination by sole shareholder company PPG Industries Inc.)

Via Gasparini, 7 42124 REGGIO EMILIA Italia

Tel. +39 0522/517803 Fax +39 0522/514384

Competent person responsible for the safety data sheet:

sdsre@icrsprint.it

Emergency phone number

Via Gasparini, 7 42124 REGGIO EMILIA Italia

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2. HAZARD(S) IDENTIFICATION

Classification of the chemical

- Warning, Flam. Liq. 3, Flammable liquid and vapour.
- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2A, Causes serious eye irritation.
- Warning, Repr. 2, Suspected of damaging the unborn child.
- Warning, Skin Sens. 1A, May cause an allergic skin reaction.
- Danger, STOT RE 1, Causes damage to organs through prolonged or repeated exposure.

Label elements

Hazard pictograms:

Danger

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H317 May cause an allergic skin reaction.

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood.

P260.F Do not breathe vapours.

P280 Wear protective gloves and eye protection.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special Provisions:

None

Contains

styrene

Hazards not otherwise classified identified during the classification process:

None

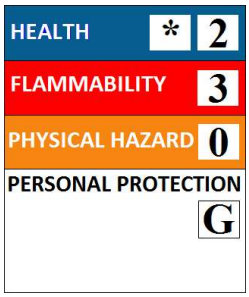
Ingredient(s) with unknown acute toxicity:

None.

Additional classification information

NFPA rating:

HMIS rating:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 15% - < 20% styrene

REACH No.: 01-2119457861-32, Index number: 601-026-00-0, CAS: 100-42-5, EC: 202-851-5

B.6/3 Flam. Liq. 3 H226

US-HAE/C3 Aquatic Chronic 3 H412

A.10/1 Asp. Tox. 1 H304

A.8/3 STOT SE 3 H335

A.7/2 Unst. Expl.

A.1/4/Inhal Acute Tox. 4 H332

A.9/1 Unst. Expl.

A.2/2 Skin Irrit. 2 H315

A.3/2A Eye Irrit. 2A H319

>= 0.01% - < 0.1% maleic anhydride

REACH No.: 01-2119472428-31, Index number: 607-096-00-9, CAS: 108-31-6, EC: 203-571-6

A.2/1B Skin Corr. 1B H314
A.9/1 STOT RE 1 H372
A.4.1/1 Resp. Sens. 1 H334
A.4.2/1 Skin Sens. 1 H317
A.1/4/Oral Acute Tox. 4 H302

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. If irritation persists: Get medical advice/attention.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for at least 15 minutes, then consult a medic immediately.
Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

See section 11 for known symptoms and effects.

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

CO_2 or Dry chemical fire extinguisher.

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.
Burning produces heavy smoke. Carbon oxides.

Hazardous combustion products:

None

Explosive properties: N.D.
Oxidizing properties: N.D.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .
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

Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Exercise the greatest care when handling or opening the container.
Do not use on extensive surface areas in premises where there are occupants.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
Storage temperature:
Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

styrene - CAS: 100-42-5

EU - TWA(8h): 85 mg/m3, 20 ppm - STEL(): 170 mg/m3, 40 ppm - Notes: Pelle
ACGIH - TWA(8h): 10 ppm - STEL: 20 ppm - Notes: OTO, A3, BEI - CNS and hearing impair, URT irr, peripheral neuropathy, visual disorders
Italy - TWA(8h): 20 ppm - STEL: 200 ppm

maleic anhydride - CAS: 108-31-6

ACGIH - TWA(8h): 0.01 mg/m3 - Notes: (IFV), DSEN, RSEN, A4 - Resp sens

DNEL Exposure Limit Values

styrene - CAS: 100-42-5

Worker Professional: 406 mg/kg - Consumer: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 2.1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Professional: 85 mg/m³ - Consumer: 10.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 289 mg/m³ - Consumer: 174.25 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 306 mg/m³ - Consumer: 182.75 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

PNEC Exposure Limit Values

styrene - CAS: 100-42-5

Target: Fresh Water - Value: 0.028 mg/l
Target: Marine water - Value: 0.028 mg/l
Target: Freshwater sediments - Value: 0.614 mg/kg
Target: Marine water sediments - Value: 0.0614 mg/kg
Target: Soil (agricultural) - Value: 0.2 mg/kg
Target: 14 - Value: 0.04 mg/l
Target: Purification plant - Value: 5 mg/l

Biological Exposure Index

styrene - CAS: 100-42-5

Value: 400 mg/g creatinine - medium: Urine - Biological Indicator: Mandelic acid in urine and fenilgliossilico - Sampling Period: End of turn
Value: 40 mg/l creatinine - medium: Urine - Biological Indicator: Styrene in urine - Sampling Period: End of turn

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, EN374 Class 3 (F). Permeation time > 60 minutes; 0.4 mm thickness.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and color:	Gray thixotropic paste
Odor:	Typical of Styrene
Odor threshold:	0.15 - 0.25 ppm ref. Styrene
pH:	N.A.
Melting point / freezing point:	N.D.
Initial boiling point and boiling range:	293°F
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	1,1% - 6,1 % - Vol.
Vapor density:	3.6 (air=1)
Flash point:	89.6°F
Evaporation rate:	N.D.
Vapor pressure:	6,7 hPa (20°C)
Relative density:	1.520 g/cm³
Solubility in water:	Insoluble
Solubility in oil:	N.D.
Auto-ignition temperature:	914°F
Decomposition temperature:	N.D.
Viscosity:	> 20.5 mm² (40°C)
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

10. STABILITY AND REACTIVITY

Reactivity
Stable under normal conditions
Chemical stability
Stable under normal conditions
Possibility of hazardous reactions
It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.
Conditions to avoid
Stable under normal conditions.
Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
Hazardous decomposition products
None.

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:
styrene - CAS: 100-42-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 11.8 mg/l - Duration: 4h
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: OECD 402
i) STOT-repeated exposure:
Test: LOAEL(C) - Route: Oral - Species: Rat = 2000 mg/kg - Notes: bw/day
Test: NOAEL(C) - Route: Oral - Species: Rat = 1000 mg/kg - Notes: bw/day
Test: LOAEL(C) - Route: Inhalation - Species: Rat = 0.21 mg/l
maleic anhydride - CAS: 108-31-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1090 mg/kg bw
Test: LD50 - Route: Skin - Species: Rabbit = 2620 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 4.35 mg/l - Duration: 1h
styrene - CAS: 100-42-5
Acute inhalation toxicity at 1000 ppm affects the central nervous system with headaches, dizziness and coordination difficulties; irritation of the mucous membranes of the eyes and respiratory tract occurs at 500 ppm. Chronic exposure gives system depression central and peripheral nervous system with memory loss, headaches and somnolence starting from 20 ppm; digestive disorders with nausea e loss of appetite; respiratory tract irritation with chronic bronchitis; dermatosis. Repeated exposure, to low doses of the substance
by inhalation, it causes irreversible changes in hearing function and can cause changes in color vision. Repeated skin exposures cause irritation. The substance degreases the skin, which can cause dryness and cracking.

Substance(s) listed on the NTP report on Carcinogens:
styrene.
Substance(s) listed on the IARC Monographs:
styrene - Group 2B.
Substance(s) listed as OSHA Carcinogen(s):
None.
Substance(s) listed as NIOSH Carcinogen(s):
None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.
styrene - CAS: 100-42-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 4.02 mg/l - Duration h: 96
Endpoint: EC50 - Species: Algae = 4.9 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia = 4.7 mg/kg - Duration h: 48
Endpoint: EC10 - Species: Algae = 0.28 mg/l - Duration h: 96
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia = 1.01 mg/l - Duration h: 504
maleic anhydride - CAS: 108-31-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 75 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 42.81 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 74.35 mg/l - Duration h: 72
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia = 10 mg/l - Duration h: 504

Persistence and degradability

styrene - CAS: 100-42-5
Biodegradability: Not persistent and Biodegradable

Bioaccumulative potential

styrene - CAS: 100-42-5
Bioaccumulation: Not bioaccumulative

Mobility in soil

styrene - CAS: 100-42-5
Mobility in soil: Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a signicant amount may penerate and pollute water table.

Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. DO NOT discharge into sewers, watercourses, ponds, canals or ditches. Empty product containers must be completely drained and stored safely until appropriately processes or disposed. Empty containers must be recycled, recovered or disposed of by a qualified and authorized company operating in compliance with current recycling, recovery and disposal regulations. It is advisable to provide the desposal company with all safety information of the material contained in the empty packaging. DO NOT pressurize, DO NOT cut, DO NOT weld, DO NOT puncture, DO NOT crush, DO NOT expose empty containers to heat, flames, sparks, electrostatic discharge or other sources of ignition.

14. TRANSPORT INFORMATION

UN number
- ADR-UN Number: 1263
- IATA-UN Number: 1263
- IMDG-UN Number: 1263

UN proper shipping name
- ADR-Shipping Name: PAINT
- IATA-Shipping Name: PAINT
- IMDG-Shipping Name: PAINT

Transport hazard class(es)
- ADR-Class: 3
- ADR-Label: 3
- ADR - Hazard identification number: 30
- IATA-Class: 3
- IATA-Label: 3
- IMDG-Class: 3
- IMDG-Class: 3.3

Packing group
- ADR-Packing Group: III
- IATA-Packing group: III
- IMDG-Packing group: III

Environmental hazards
- ADR-Enviromental Pollutant: No
- IMDG-Marine pollutant: No

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

The product is transported in conditions that comply with exemption criteria for ADR transport.

Special precautions
- ADR-Subsidiary hazards: -
- ADR-S.P.: 163 367 640E 650
- ADR-Transport category (Tunnel restriction code): 3 (D/E)
- IATA-Passenger Aircraft: 355
- IATA-Subsidiary hazards: -
- IATA-Cargo Aircraft: 366
- IATA-S.P.: A3 A72 A192
- IATA-ERG: 3L
- IMDG-Page: 3377-1
- IMDG-EmS: F-E , S-E
- IMDG-Subsidiary hazards: -
- IMDG-MFAG: 310
- IMDG-Stowage and handling: Category A
- IMDG-Segregation: -

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: all the components are listed on the TSCA inventory.

TSCA listed substances:
styrene is listed in TSCA Section 8b, Section 8a - CAIR
maleic anhydride is listed in TSCA Section 8b, Section 8d HSDR.

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances: no substances listed.

Section 304 - Hazardous substances: styrene, maleic anhydride.

Section 313 - Toxic chemical list: styrene, maleic anhydride.
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA: styrene - Reportable quantity: 1000 pounds
maleic anhydride - Reportable quantity: 5000 pounds.
Reportable quantity for mixture: 631.8619797 pounds.
CAA - Clean Air Act
CAA listed substances:
styrene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
maleic anhydride is listed in CAA Section 111, Section 112(b) - HON.
CWA - Clean Water Act
CWA listed substances:
styrene is listed in CWA Section 311
maleic anhydride is listed in CWA Section 311.

USA - State specific regulations
California Proposition 65
Substance(s) listed under California Proposition 65:
styrene - Listed as carcinogen.
Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
styrene
maleic anhydride.
New Jersey Right to know
Substance(s) listed under New Jersey Right to know:
styrene
maleic anhydride.
Pennsylvania Right to know
Substance(s) listed under Pennsylvania Right to know:
styrene
maleic anhydride.

16. OTHER INFORMATION

Full text of phrases referred to in Section 3:
H226 Flammable liquid and vapour.
H412 Harmful to aquatic life with long lasting effects.
H304 May be fatal if swallowed and enters airways.
H335 May cause respiratory irritation.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H314 Causes severe skin burns and eye damage.
H372 Causes damage to organs through prolonged or repeated exposure.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.

Safety Data Sheet dated 8/1/2022, version 2
Sections modified from the previous revision:

1. IDENTIFICATION
2. HAZARD(S) IDENTIFICATION
3. COMPOSITION/INFORMATION ON INGREDIENTS

6. ACCIDENTAL RELEASE MEASURES
7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
9. PHYSICAL AND CHEMICAL PROPERTIES
11. TOXICOLOGICAL INFORMATION
12. ECOLOGICAL INFORMATION
SECTION 14: Transport information
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
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