

**SAFETY DATA SHEET**

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
™ Trademark, INEOS or its subsidiaries, registered
in various countries
945194

1. PRODUCT AND COMPANY IDENTIFICATION**Product identifier**

Trade name : Maxguard™ GN H
™ Trademark, INEOS or its subsidiaries, registered in
various countries

Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Industrial chemical

Details of the supplier of the safety data sheet

Shanghai INEOS Composites Co., Ltd.
Unit 1801B of Xuhuiyuan Building No 1089,
South Zhongshan NO. 2 Road
Shanghai 200030
China

上海英力士复合材料有限公司
上海市中山南二路1089号徐汇苑大厦18楼1801B
上海 200030
中国

sds.composites@ineos.com

Emergency telephone number

1-800-424-9300 (+1-703-527-3887 for direct
dial), or call the local emergency number 0532
8388 9090 (China)

Regulatory Information Number

021 2402 4688 (in China), or contact your local
customer service representative

Product Information

+021 2402 4688

2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3
Acute toxicity (Inhalation) : Category 5
Skin corrosion/irritation : Category 2
Serious eye damage/eye
irritation : Category 2A
Skin sensitisation : Category 1
Reproductive toxicity : Category 1B

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Specific target organ toxicity - single exposure : Category 3 (respiratory tract irritation)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 1 (Auditory system)

Short-term (acute) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H333 May be harmful if inhaled.
 H335 May cause respiratory irritation.
 H360 May damage fertility or the unborn child.
 H372 Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.
 H401 Toxic to aquatic life.

Precautionary statements : **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P260 Do not breathe mist or vapours.
 P264 Wash skin thoroughly after handling.

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Keep dust/air mixtures away from ignition sources.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No. Registration number	Classification	Concentration (%)
STYRENE	100-42-5	Flam. Liq. 3; H226	>= 30.00 - < 50.00

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

		Acute Tox. 5; H303 Acute Tox. 4; H332 2; H315 2A; H319 STOT SE 3; H335 STOT RE 1; H372 Asp. Tox. 1; H304 Aquatic Acute 2; H401	
ALUMINUM SALT	21645-51-2	Not a hazardous substance or mixture.	>= 1.00 - < 10.00
FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED	85711-46-2	Acute Tox. 5; H303 2; H315 Skin Sens. 1; H317	>= 0.10 - < 1.00
COBALT COMPOUND	136-52-7	Acute Tox. 5; H303 2A; H319 Skin Sens. 1A; H317 Repr. 1B; H360 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	>= 0.10 - < 0.25

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
 Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.
- If inhaled : Move to fresh air.
 IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.
 Keep patient warm and at rest.
 If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
 If on skin, rinse well with water.
 Wash contaminated clothing before re-use.
 If on clothes, remove clothes.


SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

- In case of eye contact : Immediately flush eye(s) with plenty of water.
 Remove contact lenses.
 Protect unharmed eye.
- If swallowed : Obtain medical attention.
 Do not give milk or alcoholic beverages.
 Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
 stomach or intestinal upset (nausea, vomiting, diarrhea)
 irritation (nose, throat, airways)
 confusion
 Causes skin irritation.
 May cause an allergic skin reaction.
 Causes serious eye irritation.
 May be harmful if inhaled.
 May cause respiratory irritation.
 May damage fertility or the unborn child.
 Causes damage to organs through prolonged or repeated exposure if inhaled.
- Notes to physician : No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Alcohol-resistant foam
 Carbon dioxide (CO₂)
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Organic dusts at sufficient concentration can form explosive mixtures in air.
 Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
 Beware of vapours accumulating to form explosive

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

concentrations. Vapours can accumulate in low areas.
 Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO₂)
 Carbon monoxide
 Hydrocarbons
 Metal oxides

Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

Do not use a solid water stream as it may scatter and spread fire.
 Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
 Use a water spray to cool fully closed containers.

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 : Evacuate personnel to safe areas.
 Remove all sources of ignition.
 Use personal protective equipment.
 Ensure adequate ventilation.
 Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
 Comply with all applicable federal, state, and local regulations.
 Suppress (knock down) gases/vapours/mists with a water spray jet.

Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Prevention of secondary hazards : Comply with all applicable federal, state, and local regulations.
 Suppress (knock down) gases/vapours/mists with a water

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

spray jet.

7. HANDLING AND STORAGE

Handling

Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). No sparking tools should be used. Keep away from open flames, hot surfaces and sources of ignition. Use only explosion-proof equipment.

Advice on safe handling : Open drum carefully as content may be under pressure. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Container hazardous when empty. Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations. Secondary operations, such as grinding and sanding, may produce dust. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.

Avoidance of contact : Acids
 aluminum
 aluminum chloride
 Bases
 Copper
 Copper alloys
 halogens
 iron chloride
 metal salts
 Strong oxidizing agents


SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Peroxides
Storage

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 No smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
STYRENE	100-42-5	PC-TWA	50 mg/m ³	CN OEL
		PC-STEL	100 mg/m ³	CN OEL
COBALT COMPOUND	136-52-7	PC-TWA	0.05 mg/m ³ (Cobalt)	CN OEL
		PC-STEL	0.1 mg/m ³ (Cobalt)	CN OEL

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
STYRENE	100-42-5	mandelic acid plus phenylglyoxylic acid	Urine	End of shift	400 mg/g Creatinine	ZCN_B EI
		mandelic acid plus phenylglyoxylic acid	Urine	End of shift	295 Millimoles per mole Creatinine	ZCN_B EI
		mandelic acid plus phenylglyoxylic acid	Urine	Before next shift	120 Millimoles per mole Creatinine	ZCN_B EI
		mandelic acid plus phenylglyoxylic acid	Urine	Before next shift	160 mg/g Creatinine	ZCN_B EI

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

applicable) or below levels that cause known, suspected or
 apparent adverse effects.
 Provide appropriate exhaust ventilation at places where dust
 is formed.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an
 approved filter.

Filter type : Organic vapour type

Hand protection

Material : Laminate (Barrier© or Silvershield©)

Break through time : 480 min

Glove thickness : > 0.5 mm

Remarks : The exact break through time can be obtained from the
 protective glove producer and this has to be observed. Gloves
 should be discarded and replaced if there is any indication of
 degradation or chemical breakthrough.
 The suitability for a specific workplace should be discussed
 with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for
 exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:
 Impervious clothing
 Safety shoes
 Flame-resistant clothing
 Choose body protection according to the amount and
 concentration of the dangerous substance at the work place.
 Discard gloves that show tears, pinholes, or signs of wear.

Hygiene measures : Wash hands before breaks and at the end of workday.
 When using do not eat or drink.
 When using do not smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : clear

Odour : aromatic

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: < -30 °C Value for Component
Boiling point/boiling range	: 145 °C Value for Component
Flash point	: 29.4 °C Method: Seta closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: May form combustible dust concentrations in air.
Upper explosion limit	: 6.1 %(V) Value for Component
Lower explosion limit	: 1.1 %(V) Value for Component
Vapour pressure	: 6 hPa (20 °C)
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1.078 g/cm ³ (25 °C)
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: > 20.5 mm ² /s (40 °C)
Oxidizing properties	: No data available

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

10. STABILITY AND REACTIVITY

- Reactivity : No decomposition if stored and applied as directed.
- Chemical stability : Stable under recommended storage conditions.
- Possibility of hazardous reactions : Hazardous polymerisation may occur.
 Vapours may form explosive mixture with air.
 This product does not present a dust explosion hazard as delivered. However, fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.
- Conditions to avoid : Exposure to air.
 Exposure to sunlight.

 Heat, flames and sparks.
- Incompatible materials : Acids
 aluminum
 aluminum chloride
 Bases
 Copper
 Copper alloys
 halogens
 iron chloride
 metal salts
 Strong oxidizing agents
 Peroxides
- Hazardous decomposition products : Hydrocarbons
 Acetone
 Carbon dioxide (CO₂)
 Carbon monoxide
 aluminum oxides

11. TOXICOLOGICAL INFORMATION

- Exposure routes : Inhalation, Skin contact, Eye Contact, Ingestion

Acute toxicity

May be harmful if inhaled.

Components:

STYRENE:

- Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg


SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

- Acute inhalation toxicity : LC50 (Rat): 11.8 mg/l, 2770 ppm
 Exposure time: 4 h
 Test atmosphere: vapour
- No observed adverse effect level (Humans): 100 ppm
 Exposure time: 7 h
 Test atmosphere: vapour
- Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
 Method: OECD Test Guideline 402
 Assessment: No adverse effect has been observed in acute dermal toxicity tests.
- ALUMINUM SALT:**
 Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
- LD50 (Rat, female): > 2,000 mg/kg
 Method: OECD Test Guideline 423
 GLP: yes
 Assessment: No adverse effect has been observed in acute oral toxicity tests.
- Acute inhalation toxicity : LC50 (Rat): > 2.3 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Assessment: Not classified as acutely toxic by inhalation under GHS.
 Remarks: Information given is based on data obtained from similar substances.
- FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:**
 Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
 Method: OECD Test Guideline 401
- COBALT COMPOUND:**
 Acute oral toxicity : LD50 (Rat, female): ca. 3,129 mg/kg
- Acute inhalation toxicity : LC50 (Rat): > 10 mg/l
 Exposure time: 1 h
 Test atmosphere: dust/mist
 Assessment: Not classified as acutely toxic by inhalation under GHS., No adverse effect has been observed in acute inhalation toxicity tests.
- Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Skin corrosion/irritation

Causes skin irritation.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Remarks: May cause skin irritation and/or dermatitis.

Components:

STYRENE:

Species: Rabbit

Result: Irritating to skin.

Species: human skin

Result: No skin irritation

ALUMINUM SALT:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Species: reconstructed human epidermis (RhE)

Method: OECD Test Guideline 439

Result: Irritating to skin.

COBALT COMPOUND:

Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

STYRENE:

Result: Irritating to eyes.

Remarks: Vapour during processing may be irritating to the respiratory tract and to the eyes.

ALUMINUM SALT:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Species: Rabbit

Result: No skin irritation

Method: OECD Test Guideline 405

COBALT COMPOUND:

Species: Rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:

STYRENE:

Exposure routes: Skin contact

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Result: negative

Exposure routes: inhalation (vapour)

Species: Humans

Assessment: Does not cause respiratory sensitisation.

Result: negative

ALUMINUM SALT:

Test Type: Maximisation Test

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 406

GLP: yes

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Test Type: Local lymph node assay

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 429

COBALT COMPOUND:

Test Type: Local lymph node assay

Species: Mouse

Assessment: The product is a skin sensitiser, sub-category 1A.

Method: OECD Test Guideline 429

Germ cell mutagenicity

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Not classified based on available information.

Components:

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Genotoxicity in vitro : Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471
 Result: negative

COBALT COMPOUND:

Genotoxicity in vitro : Test Type: Ames test
 Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
 Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

May damage fertility or the unborn child.

Components:

COBALT COMPOUND:

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Some evidence of adverse effects on development, based on animal experiments.

STOT - single exposure

May cause respiratory irritation.

Components:

STYRENE:

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

Components:

STYRENE:

Exposure routes: inhalation (vapour)

Target Organs: Auditory system

Assessment: Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

STYRENE:

Species: Human

85 mg/m³

Application Route: inhalation (vapour)

Species: Human

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

615 mg/kg
 Application Route: Skin contact

Aspiration toxicity

Not classified based on available information.

Components:

STYRENE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Solvents may degrease the skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

STYRENE:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4.02 mg/l
 Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 4.7 mg/l
 aquatic invertebrates Exposure time: 48 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.9
 mg/l
 Exposure time: 72 h

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 1.01 mg/l
 aquatic invertebrates Exposure time: 21 d
 (Chronic toxicity)

Toxicity to bacteria : EC50 (activated sludge): ca. 500 mg/l
 Exposure time: 0.5 h

Toxicity to soil dwelling : NOEC (Eisenia fetida (earthworms)): 34 mg/kg
 organisms Exposure time: 14 d
 Method: OECD Test Guideline 207

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Toxicity to fish : LL50 (Leuciscus idus (Golden orfe)): > 150 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: WAF
 Method: DIN 38412

Toxicity to daphnia and other : EL50 (Daphnia magna (Water flea)): > 100 mg/l

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

aquatic invertebrates

Exposure time: 48 h
 Test Type: semi-static test
 Test substance: WAF
 Method: OECD Test Guideline 202

Toxicity to algae

: EL50 (Pseudokirchneriella subcapitata (microalgae)): > 100 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 201

COBALT COMPOUND:

M-Factor (Short-term (acute) aquatic hazard) : 1

Ecotoxicology Assessment
 Short-term (acute) aquatic hazard

: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard

: Harmful to aquatic life with long lasting effects.

No data available

Persistence and degradability

Components:

STYRENE:

Biodegradability

: Result: Readily biodegradable.
 Biodegradation: > 60 %
 Exposure time: 10 d

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Biodegradability

: Result: Not readily biodegradable.
 Biodegradation: 40 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301F

COBALT COMPOUND:

Biodegradability

: Result: Readily biodegradable.
 Biodegradation: 60 %
 Exposure time: 10 d
 Method: OECD Test Guideline 301B

No data available

Bioaccumulative potential

Components:

STYRENE:

INEOS

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

Bioaccumulation : Bioconcentration factor (BCF): < 100

Partition coefficient: n-
 octanol/water : log Pow: 2.96 (25 °C)

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Partition coefficient: n-
 octanol/water : log Pow: < 1 (25 °C)

No data available

Mobility in soil

Components:

STYRENE:

Distribution among
 environmental compartments : Koc: 352

No data available

Other adverse effects

Product:

Additional ecological
 information : An environmental hazard cannot be excluded in the event of
 unprofessional handling or disposal., Toxic to aquatic life.

Components:

STYRENE:

Results of PBT and vPvB
 assessment : This substance is not considered to be persistent,
 bioaccumulating and toxic (PBT). This substance is not
 considered to be very persistent and very bioaccumulating
 (vPvB).

FATTY ACIDS, C14-18 AND C16-18 UNSATD., MALEATED:

Results of PBT and vPvB
 assessment : This substance is not considered to be persistent,
 bioaccumulating and toxic (PBT). This substance is not
 considered to be very persistent and very bioaccumulating
 (vPvB).

COBALT COMPOUND:

Results of PBT and vPvB
 assessment : Remarks: Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Do not contaminate ponds, waterways or ditches with
 chemical or used container.
 Container hazardous when empty.
 Dispose of in accordance with local regulations.

**SAFETY DATA SHEET**

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

The product should not be allowed to enter drains, water courses or the soil.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.
 Do not re-use empty containers.
 Do not burn, or use a cutting torch on, the empty drum.

14. TRANSPORT INFORMATION**International transport regulations****REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

CN_DG

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL MARITIME DANGEROUS GOODS

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

**SAFETY DATA SHEET**

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
™ Trademark, INEOS or its subsidiaries, registered
in various countries
945194

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION**National regulatory information****Law on the Prevention and Control of Occupational Diseases**

Regulations on the Control over Safety of Dangerous Chemicals (Decree No. 591 of the State Council of the People's Republic of China)

List of dangerous goods (GB12268-2012)**Classification and code of dangerous goods (GB6944-2012)****Safety Data Sheet for chemical products – Content and order of sections (GB16483-2008)****General rule for classification and hazard communication of chemicals (GB13690-2009)****The components of this product are reported in the following inventories:**

TCSI	: Not in compliance with the inventory
TSCA	: On or in compliance with the active portion of the TSCA inventory
AiIC	: Not in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory

Inventories

AiIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

SAFETY DATA SHEET

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
 ™ Trademark, INEOS or its subsidiaries, registered
 in various countries
 945194

16. OTHER INFORMATION

Further information

Revision Date: 09/23/2022

Full text of H-Statements

H226	Flammable liquid and vapour.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by INEOS's Environmental Health and Safety Department.

Sources of key data used to compile the Safety Data Sheet
 INEOS internal data including own and sponsored test reports
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Full text of other abbreviations
 AU OEL : Australia. Workplace Exposure Standards for Airborne Contaminants.
 CN OEL : China. Occupational Exposure Limits

**SAFETY DATA SHEET**

Revision Date: 09/23/2022

Print Date: 08.08.2023

SDS Number: R0604980

Version: 4.0

Maxguard™ GN H
™ Trademark, INEOS or its subsidiaries, registered
in various countries
945194

HK OEL : Hong Kong. Code of Practice on Control of Air Impurities (Chemical Substances) in the Workplace

IN OEL : India. Permissible levels of certain chemical substances in work environment.

ID OEL : Indonesia. Occupational Exposure Limits

JPJSH OEL : Japan. The Japan Society for Occupational Health. Recommendation of Occupational Exposure Limits

JPISHL OEL : Japan. Administrative Control Levels

KOR OEL : Korea. Occupational Exposure Limits

MY OEL : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health)

NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

PH OEL : Philippines. Threshold Limit Values For Airborne Contaminants

SG OEL : Singapore. Workplace Safety and Health Act - First Schedule Permissible Exposure Limits of Toxic Substances

TW OEL : Taiwan. Standards on the Concentration Levels of Hazardous Substances in the Air at Workplace

TH OEL : Thailand. Occupational Exposure Limits

VN OEL : Vietnam. Occupational Exposure Limits

CN / EN