



Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 2025-01-14

Revision Number 14

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code 635662
Product Name His60 Ni Superflow Resin
Pure substance/mixture Mixture

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

Identified uses For research use only. Not for use in diagnostic procedures
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

USA:

Takara Bio USA, Inc.
2560 Orchard Parkway
San Jose, CA 95131, USA
Phone: 800.662.2566/888.251.6618
Web: www.takarabio.com

Europe:

Takara Bio Europe S.A.S.
34, Rue de la Croix de Fer
78100 Saint-Germain-en-Laye, France
Phone: +33.1.39.04.68.80
Web: www.takarabio.com

Europe:

Takara Bio Europe AB
Arvid Wallgrens Backe 20,
SE-413 46 Göteborg, Sweden
Phone: +46.31.758.09.00
Web: www.takarabio.com

India:

DSS Takara Bio India Pvt. Ltd.
A-5 Mohan Co-operative Industrial Estate, Mathura Road,
New Delhi 110044, India
Phone: +91.1800.212.4922 (Toll free)
Web: www.takarabio.com

For further information, please contact:

1.4. Emergency telephone number

Emergency telephone In case of emergency, call PERS (Professional Emergency Resource Services)
1-800-633-8253 (US) or 801-629-0667 (international).

| | |
|-------|--------------|
| Italy | Marco Marano |
|-------|--------------|

| |
|---|
| CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA Roma, Piazza Sant'Onofrio,4 00165 0668593726 |
|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No. 1272/2008 [CLP]

| | |
|---|---------------------|
| Hazardous to the aquatic environment - chronic | Category 3 - (H412) |
|---|---------------------|

2.2. Label elements

Hazard statements

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P273 - Avoid release to the environment

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

Harmful to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---------------------|----------|---------------------------|-----------------------------|---|------------------------------------|----------|----------------------|
| Ethanol 64-17-5 | 10 - 20 | No data available | 200-578-6 (603-002-00-5) | Flam. Liq. 2 (H225) | - | - | - |
| Nickel 7440-02-0 | < 0.1 | No data available | 231-111-4 (028-002-00-7) | Skin Sens. 1 (H317) Carc. 2 (H351) STOT RE 1 (H372) | - | - | - |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapor - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---------------------|-----------------|-------------------|---|---|--------------------------------------|
| Ethanol 64-17-5 | 7060 | No data available | 116.9 133.8 | No data available | No data available |
| Nickel 7440-02-0 | 9000 | No data available | No data available | No data available | No data available |

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|--|
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Rinse mouth. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---------------------|--|--|--|---|--|
| Ethanol 64-17-5 | - | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL 2000 ppm STEL 3800 mg/m ³ | TWA: 1000 ppm TWA: 1907 mg/m ³ | TWA: 1000 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ |
| Nickel 7440-02-0 | - | Sa+ Sh+ | TWA: 0.1 mg/m ³ TWA: 0.01 mg/m ³ | - | TWA: 0.5 mg/m ³ Skin Sensitisation |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Ethanol 64-17-5 | - | TWA: 1000 mg/m ³ Ceiling: 3000 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 2000 ppm STEL: 3800 mg/m ³ | TWA: 500 ppm TWA: 1000 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³ |
| Nickel 7440-02-0 | - | TWA: 0.05 mg/m ³ S+ Ceiling: 1 mg/m ³ | TWA: 0.05 mg/m ³ STEL: 0.1 mg/m ³ | TWA: 0.5 mg/m ³ S+ | TWA: 0.01 mg/m ³ |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Ethanol 64-17-5 | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³ | TWA: 200 ppm TWA: 380 mg/m ³ | TWA: 200 ppm TWA: 380 mg/m ³ Peak: 800 ppm Peak: 1520 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 2000 ppm STEL: 3800 mg/m ³ |
| Nickel 7440-02-0 | TWA: 1 mg/m ³ | TWA: 0.03 mg/m ³ TWA: 0.006 mg/m ³ | respiratory and skin sensitizer inhalable | TWA: 1 mg/m ³ | TWA: 0.01 mg/m ³ sz+ |

| | | | | | |
|----------------------|---|--|---|--|---|
| | | Sh+ | fraction, respiratory sensitization confirmed for water soluble Nickel compounds only | | |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Ethanol 64-17-5 | STEL: 1000 ppm | - | STEL: 1000 ppm STEL: 1884 mg/m ³ | TWA: 1000 mg/m ³ | TWA: 500 ppm TWA: 1000 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³ |
| Nickel 7440-02-0 | - | - | TWA: 1.5 mg/m ³ | - | TWA: 0.5 mg/m ³ J+ |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Ethanol 64-17-5 | - | - | TWA: 137 ppm TWA: 260 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³ Sk* | TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³ | TWA: 1900 mg/m ³ |
| Nickel 7440-02-0 | - | - | - | TWA: 0.05 mg/m ³ STEL: 0.15 mg/m ³ A+ | TWA: 0.25 mg/m ³ |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| Ethanol 64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³ | TWA: 500 ppm TWA: 960 mg/m ³ Ceiling: 1920 mg/m ³ | TWA: 960 mg/m ³ TWA: 500 ppm STEL: 1000 ppm STEL: 1920 mg/m ³ | STEL: 1000 ppm STEL: 1910 mg/m ³ |
| Nickel 7440-02-0 | TWA: 1.5 mg/m ³ | TWA: 0.1 mg/m ³ STEL: 0.5 mg/m ³ | TWA: 0.1 mg/m ³ STEL: 0.05 mg/m ³ S+ | TWA: 0.006 mg/m ³ STEL: 0.048 mg/m ³ | TWA: 1 mg/m ³ Sen+ |
| Chemical name | Sweden | | Switzerland | United Kingdom | |
| Ethanol 64-17-5 | NGV: 500 ppm NGV: 1000 mg/m ³ Vägledande KGV: 1000 ppm Vägledande KGV: 1900 mg/m ³ | | TWA: 500 ppm TWA: 960 mg/m ³ STEL: 1000 ppm STEL: 1920 mg/m ³ | TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³ | |
| Nickel 7440-02-0 | NGV: 0.5 mg/m ³ S+ | | TWA: 0.5 mg/m ³ S+ | TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³ Sk* | |

Biological occupational exposure limits

| | | | | | |
|----------------------|-----------------------|--|--|---|--|
| Chemical name | European Union | Austria | Bulgaria | Croatia | Czech Republic |
| Nickel 7440-02-0 | - | 7 µg/L - urine (spontaneous urine) - after end of work day, at the end of a work week/end of the shift | 45 µg/L - urine (Nickel) - after several work shifts | 10 µg/L - plasma (Nickel) - at the end of the work shift 8 µg/g Creatinine - urine (Nickel) - at the end of the work shift | 0.077 µmol/mmol Creatinine (urine - Nickel discretionary) 0.04 mg/g Creatinine (urine - Nickel discretionary) |
| Chemical name | Denmark | Finland | France | Germany DFG | Germany TRGS |
| Nickel 7440-02-0 | - | 0.1 µmol/L (urine - Nickel after the shift after a working week or exposure period) | - | 3 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) urine 15 µg/L - (long-term exposure: at the end of the shift after several shifts) - urine 30 µg/L - (long-term exposure: at the end | - |

| | | | | of the shift after several shifts) - urine 45 µg/L - (long-term exposure: at the end of the shift after several shifts) - urine 15 µg/L - (end of shift) - urine 30 µg/L - (end of shift) - urine 45 µg/L - (end of shift) - urine | |
|---------------------|--|--|---|--|--|
| Chemical name | Hungary | Ireland | Italy MDLPS | Italy AIDII | |
| Nickel 7440-02-0 | 0.003 mg/L (urine - Nickel at end of workweek, end of shift) 0.051 µmol/L (urine - Nickel at end of workweek, end of shift) | 3 µg/L (urine - Nickel after several consecutive working shifts) | - | - | |
| Chemical name | Latvia | Luxembourg | Romania | Slovakia | |
| Nickel 7440-02-0 | - | - | 3 µg/L - urine (Nickel) - end of shift | 0.03 mg/L (blood - Nickel end of exposure or work shift) | |
| Chemical name | Slovenia | Spain | Switzerland | United Kingdom | |
| Nickel 7440-02-0 | - | - | 45 µg/L (urine - Nickel end of shift, and after several shifts (for long-term exposures)) 766.6 nmol/L (urine - Nickel end of shift, and after several shifts (for long-term exposures)) | - | |

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal Protective Equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

| | |
|-----------------------|--------------------------|
| Appearance | Slurry |
| Color | No information available |
| Odor | Alcohol |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|--------------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point/boiling range (°C) | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Flash point | No data available | Open cup |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | No data available | None known |
| Dynamic Viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility in other solvents | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapor pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk Density | No data available | |
| Liquid Density | No data available | |
| Vapor density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 99,999.00 mg/kg
ATEmix (inhalation-dust/mist) 602.60 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|----------------------|-------------|--|
| Ethanol | = 7060 mg/kg (Rat) | - | = 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h |
| Nickel | > 9000 mg/kg (Rat) | - | > 10.2 mg/L (Rat) 1 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | European Union |
|---------------|----------------|
| Nickel | Carc. 2 |

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------|--|---|----------------------------|--|
| Ethanol | - | LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas) | - | LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) |
| Nickel | EC50: =0.18mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.174 - 0.311mg/L (96h, Pseudokirchneriella subcapitata) | LC50: >100mg/L (96h, Brachydanio rerio) LC50: =1.3mg/L (96h, Cyprinus carpio) LC50: =10.4mg/L (96h, Cyprinus carpio) | - | EC50: >100mg/L (48h, Daphnia magna) EC50: =1mg/L (48h, Daphnia magna) |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Ethanol | -0.35 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

| Chemical name | PBT and vPvB assessment |
|---------------|---|
| Ethanol | The substance is not PBT / vPvB |
| Nickel | The substance is not PBT / vPvB PBT assessment does not apply |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

- | | |
|-----------------------------------|--------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 UN proper shipping name | No information available |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

IMDG

- | | |
|--|--------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 UN proper shipping name | No information available |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|-----------------------------------|--------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 UN proper shipping name | No information available |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|--------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 UN proper shipping name | No information available |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

| Chemical name | French RG number | Title |
|--------------------|------------------|-------|
| Ethanol 64-17-5 | RG 84 | - |

Germany**TA Luft (German Air Pollution Control Regulation)****Netherlands**

| Chemical name | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins |
|---------------|-----------------------------------|--------------------------------|--|
| Ethanol | Present | - | Fertility Category 1A Development Category 1A Can be harmful via breastfeeding |

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorization per REACH Annex XIV |
|--------------------|---|--|
| Nickel - 7440-02-0 | 27 75 | - |

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) Regulation (EU) 2024/590

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) |
|-------------------|--|
| Ethanol - 64-17-5 | Product-type 1: Human hygiene Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area |

EU - Water Framework Directive (2000/60/EC)

| Chemical name | EU - Water Framework Directive (2000/60/EC) |
|--------------------|---|
| Nickel - 7440-02-0 | Priority substance |

EU - Environmental Quality Standards (2008/105/EC)

| Chemical name | EU - Environmental Quality Standards (2008/105/EC) |
|--------------------|--|
| Nickel - 7440-02-0 | Priority substance |

International Inventories

| | |
|---------------|---|
| TSCA | - |
| DSL/NDSL | - |
| EINECS/ELINCS | - |
| ENCS | - |
| IECSC | - |
| KECI | - |
| PICCS | - |
| AICS | - |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment**Chemical Safety Assessment** No information available**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H225 - Highly flammable liquid and vapor

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------|------|---------------------------|
| TWA | Time weighted average | STEL | Short term exposure limit |
| Ceiling | Maximum limit value | * | Skin designation |
| ** | Hazard Designation | + | Sensitizers |

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitization | Calculation method |
| Skin sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision Date 2025-01-14

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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.

End of Safety Data Sheet