SAFETY DATA SHEET

Revision date: 5 December 2023 Date of previous issue: 18 January 2023 SDS No. 277-13

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
ARC 5ES

Unique Formula Identifier (UFI): S6S-RTWU-E2QD-DCCY

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

Relevant identified uses: ARC Polymer Composite. Repair damage caused by impact, abrasion, erosion or corrosion; rebuild worn areas; fill holes and cracks; provide abrasion resistant surfaces. The product is used as a fast cure patching material that applies like putty.

Uses advised against: None noted

Reason why uses advised against: Not applicable

1.3. Details of the supplier of the safety data sheet

Company: A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel. +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive, Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23, D85737 Ismaning, Germany – Tel. +49-89-996-5460

1.4. Emergency telephone number
24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin irritation, Category 2, H315
Skin sensitization, Category 1, H317
Eye irritation, Category 2, H319
Hazardous to the aquatic environment, Chronic, Category 3, H412

2.1.2. Additional information
For full text of H-statements: see SECTIONS 2.2 and 16. The final cured material is considered nonhazardous.

2.2. Label elements
Hazard pictograms:

Signal word: Warning
Hazard statements:  
H315  Causes skin irritation.  
H317  May cause an allergic skin reaction.  
H319  Causes serious eye irritation.  
H412  Harmful to aquatic life with long lasting effects.  

Precautionary statements:  
P264  Wash hands thoroughly after handling.  
P272  Contaminated work clothing must not be allowed out of the workplace.  
P273  Avoid release to the environment.  
P280  Wear protective gloves and eye/face protection.  
P302/352  IF ON SKIN: Wash with plenty of soap and water.  
P362/364  Take off contaminated clothing and wash it before reuse.  
P333/313  If skin irritation or rash occurs: Get medical advice/attention.  
P337/313  If eye irritation persists: Get medical advice/attention.  
P501  Dispose of contents/container to an approved waste disposal plant.  

Supplemental information:  
2.3. Other hazards  
None known  

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS  

3.2. Mixtures  

<table>
<thead>
<tr>
<th>Hazardous Ingredients¹</th>
<th>% Wt.</th>
<th>CAS No./EC No.</th>
<th>REACH Reg. No.</th>
<th>CLP/GHS Classification</th>
<th>SCL, M-factor, ATE</th>
</tr>
</thead>
</table>
| Epoxy resin            | 10 - < 25 | 1875-54-3 * 216-823-5 | NA | Skin Irrit. 2, H315  
Skin Sens. 1, H317  
Eye Irrit. 2, H319  
Aquatic Chronic 2, H411 | Eye Irrit. 2A, H319: C ≥ 5 %  
Skin Irrit. 2, H315: C ≥ 5 %  
ATE (oral): > 5,000 mg/kg  
ATE (dermal): > 2,000 mg/kg |

Other ingredients:  
| Talc (non-asbestiform) | 30 - 60 | 14807-96-6 238-877-9 | NA | Not classified** | ATE (oral): > 5,000 mg/kg |
| Silica (Quartz)        | 0.1 - 1 | 14808-60-7 238-878-4 | NA | Not classified** | NA |
| Carbon black           | < 1    | 1333-86-4 215-609-9 | NA | Not classified** | ATE (oral): > 8,000 mg/kg |

¹ Classified according to:  
• 1272/2008/EC, GHS, REACH  
• WHMIS 2015  
• Safe Work Australia  

** Substance with a workplace exposure limit.  

For full text of H-statements: see SECTION 16.  

SECTION 4: FIRST AID MEASURES  

4.1. Description of first aid measures  

Inhalation:  
Not applicable  

Skin contact:  
Remove contaminated clothing. Wash clothing before reuse. Wash skin with soap and water. Consult physician.  

Eye contact:  
Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.  

Ingestion:  
Do not induce vomiting. If person is conscious, rinse mouth with water and give small quantities of water to drink. Contact physician immediately.  

Protection of first-aiders:  
No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. See section 8.2.2 for recommendations on personal protective equipment.  

4.2. Most important symptoms and effects, both acute and delayed  
Irritating to eyes and skin. May cause skin sensitization as evidenced by rashes or hives.
4.3. Indication of any immediate medical attention and special treatment needed
Treat symptoms.

**SECTION 5: FIREFIGHTING MEASURES**

5.1. Extinguishing media
*Suitable extinguishing media:* Carbon dioxide, dry chemical, foam or water fog
*Unsuitable extinguishing media:* None known

5.2. Special hazards arising from the substance or mixture
*Hazardous combustion products:* Thermal decomposition may produce Carbon Monoxide, Carbon Dioxide, oxides of Sulfur and other toxic fumes.

5.3. Advice for firefighters
Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1. Personal precautions, protective equipment and emergency procedures
Avoid skin contact. Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions
Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up
Scoop up and transfer to a suitable container for disposal.

6.4. Reference to other sections
Refer to section 13 for disposal advice.

**SECTION 7: HANDLING AND STORAGE**

7.1. Precautions for safe handling
Avoid eye contact and excessive skin contact. Wash with soap and water immediately after use. Remove contaminated clothing immediately. Wash clothing before reuse. Contaminated leather including shoes cannot be decontaminated and should be discarded. Utilize exposure controls and personal protection as specified in Section 8. Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding.

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry area.

7.3. Specific end use(s)
No special precautions.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1. Control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>OSHA PEL¹ ppm</th>
<th>OSHA PEL¹ mg/m³</th>
<th>ACGIH TLV² ppm</th>
<th>ACGIH TLV² mg/m³</th>
<th>UK WEL³ ppm</th>
<th>UK WEL³ mg/m³</th>
<th>AUSTRALIA ES⁴ ppm</th>
<th>AUSTRALIA ES⁴ mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Talc</td>
<td>20 mppcf</td>
<td>N/A</td>
<td>(resp.)</td>
<td>2</td>
<td>(resp.)</td>
<td>1</td>
<td>(resp.)</td>
<td>2.5</td>
</tr>
<tr>
<td>Silica (Quartz) non-respirable</td>
<td>(resp.)</td>
<td>0.05</td>
<td>(resp.)</td>
<td>0.025</td>
<td>(resp.)</td>
<td>0.1</td>
<td>(resp.)</td>
<td>0.05</td>
</tr>
<tr>
<td>Carbon black</td>
<td>N/A</td>
<td>3.5</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
<td>3.5</td>
<td>STEL: 7</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Product: ARC 5ES

Date: 5 December 2023

SDS No. 277-13

1 United States Occupational Health & Safety Administration permissible exposure limits
2 American Conference of Governmental Industrial Hygienists threshold limit values
3 EH40 Workplace exposure limits, Health & Safety Executive
4 Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:

Workers

<table>
<thead>
<tr>
<th>Substance</th>
<th>Route of exposure</th>
<th>Potential health effects</th>
<th>DNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Inhalation</td>
<td>Acute effects, local / Acute effects, systemic</td>
<td>no data available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chronic effects, local</td>
<td>no data available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chronic effects, systemic</td>
<td>4.93 mg/m³ (GESTIS)</td>
</tr>
<tr>
<td>Talc</td>
<td>Inhalation</td>
<td>Chronic effects, local</td>
<td>3.6 mg/m³ (GESTIS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chronic effects, systemic</td>
<td>2.16 mg/m³ (GESTIS)</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Not available

8.2. Exposure controls

8.2.1. Engineering measures

No special requirements. If it is necessary to alter the final cured product such that dust may be generated, use adequate dust extraction or damp down.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed.

Protective gloves: Chemical resistant gloves (e.g., neoprene)

Eye and face protection: Safety glasses

Other: None

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>pH</th>
<th>Kinematic viscosity</th>
<th>Solubility in water</th>
<th>Partition coefficient</th>
<th>n-octanol/water (log value)</th>
<th>Vapour pressure @ 20°C</th>
<th>Density and/or relative density</th>
<th>Weight per volume</th>
<th>Vapour density (air=1)</th>
<th>Rate of evaporation (ether=1)</th>
<th>% Aromatics by weight</th>
<th>Particle characteristics</th>
<th>Explosive properties</th>
<th>Oxidising properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>putty</td>
<td></td>
<td>&gt; 10 million cps @25°C</td>
<td>insoluble</td>
<td>not applicable</td>
<td>2.247 kg/l</td>
<td>0</td>
<td>18.75 lbs/gal.</td>
<td>&gt; 1</td>
<td>&gt; 1</td>
<td>&lt; 1</td>
<td>0</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>gray and black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sweet and amine odor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM Closed Cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.
10.2. Chemical stability
Stable

10.3. Possibility of hazardous reactions
No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid
No specific data

10.5. Incompatible materials
No specific data

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Primary route of exposure</th>
<th>Information on hazard classes as defined in Regulation (EC) No 1272/2008 / GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin and eye contact. Personnel with pre-existing skin and eye disorders and skin allergies may be aggravated by exposure.</td>
<td></td>
</tr>
</tbody>
</table>

Acute toxicity -

**Oral:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>LD50, rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

**Dermal:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>LD50, rabbit</td>
<td>&gt; 6000 mg/kg</td>
</tr>
</tbody>
</table>

**Inhalation:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>LC50, rat, 5 h</td>
<td>No mortality at vapor saturation level</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation:

Irritating to skin.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Skin irritation, rabbit</td>
<td>Moderate irritation / Severe irritation</td>
</tr>
</tbody>
</table>

Serious eye damage/irritation:

Irritating to eyes.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Eye irritation, rabbit</td>
<td>Mild irritation / Moderate irritation</td>
</tr>
</tbody>
</table>

Respiratory or skin sensitisation:

May cause skin sensitization as evidenced by rashes or hives.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Skin sensitization, guinea pig</td>
<td>Sensitizing</td>
</tr>
</tbody>
</table>

Germ cell mutagenicity:

Epoxy resin (number average molecular weight <= 700): based on available data, the classification criteria are not met.

Carcinogenicity:

The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have classified inhaled silica as a human carcinogen. IARC has designated carbon black as possibly carcinogenic to humans (group 2B). The silica and carbon black in this product do not separate from the mixture or in of themselves become airborne, therefore, do not present a hazard in normal use. Epoxy resin (number average molecular weight <= 700): based on available data, the classification criteria are not met.

Reproductive toxicity:

Epoxy resin (number average molecular weight <= 700): based on available data, the classification criteria are not met.

STOT – single exposure:

Not expected to cause toxicity.
STOT – repeated exposure: Repeated or prolonged inhalation of Talc dust may cause chronic cough, shortness of breath, scarring of the lungs (pulmonary fibrosis) and mild symptomatic pneumoconiosis. Repeated inhalation of respirable free silica may cause scarring of the lungs with cough and shortness of breath. Silicosis, a delayed lung injury that is a disabling, progressive and sometimes fatal pulmonary fibrosis, may result. The silica and talc in this product do not separate from the mixture or in of themselves become airborne, therefore, do not present a hazard in normal use. Epoxy resin (number average molecular weight <= 700): not expected to cause toxicity.

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

11.2. Information on other hazards
None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability
Epoxy resin: not readily biodegradable (OECD 301F, 28 days = 5%).

12.3. Bioaccumulative potential
Epoxy resin: low potential for bioaccumulation. (log Kow = 2.64 – 3.78, BCF = 31).

12.4. Mobility in soil
Putty. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Epoxy resin: if product enters soil, it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment
Not available

12.6. Endocrine disrupting properties
None known

12.7. Other adverse effects
None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Unreacted components are a special waste (classified as hazardous according to 2008/98/EC). Combine resin and curative. The final cured material is considered nonhazardous. Landfill sealed containers with a properly licensed facility. May be incinerated at an appropriate facility. Check local, state and national/federal regulations and comply with the most stringent requirement.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

<table>
<thead>
<tr>
<th>ADG/ADR/RID/ADN/IMDG/ICAO:</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG:</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>US DOT:</td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>ADG/ADR/RID/ADN/IMDG/ICAO:</th>
<th>NON-HAZARDOUS, NON REGULATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG:</td>
<td>NON-HAZARDOUS, NON REGULATED</td>
</tr>
<tr>
<td>US DOT:</td>
<td>NON-HAZARDOUS, NON REGULATED</td>
</tr>
</tbody>
</table>

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADG/ADR/RID/ADN/IMDG/ICAO:</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG:</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>US DOT:</td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

14.4. Packing group

<table>
<thead>
<tr>
<th>ADG/ADR/RID/ADN/IMDG/ICAO:</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG:</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>US DOT:</td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

14.5. Environmental hazards

|                           | NOT APPLICABLE |

14.6. Special precautions for user

|                           | NOT APPLICABLE |
14.7. Maritime transport in bulk according to IMO instruments
   NOT APPLICABLE
14.8. Other information
   NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION

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

15.1.1. EU regulations
   Authorisations under Title VII: Not applicable
   Restrictions under Title VIII: None
   Other EU regulations: Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations
   US EPA SARA TITLE III
   312 Hazards: Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:
   Skin irritation
   Skin sensitization
   Eye irritation
   None
   TSCA: All chemical components are listed or exempted.
   Other national regulations: National implementation of the EC Directive referred to in section 15.1.1.

15.2. Chemical safety assessment
   No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:
   ADG: Australian Dangerous Goods Code
   ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
   ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
   ATE: Acute Toxicity Estimate
   BCF: Bioconcentration Factor
   cATpE: Converted Acute Toxicity point Estimate
   CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
   ES: Exposure Standard
   GHS: Globally Harmonized System
   ICAO: International Civil Aviation Organization
   IMDG: International Maritime Dangerous Goods
   LC50: Lethal Concentration to 50 % of a test population
   LD50: Lethal Dose to 50% of a test population
   LOEL: Lowest Observed Effect Level
   N/A: Not Applicable
   NA: Not Available
   NOEC: No Observed Effect Concentration
   NOEL: No Observed Effect Level
   OECD: Organization for Economic Co-operation and Development
   PBT: Persistent, Bioaccumulative and Toxic substance
   (Q)SAR: Quantitative Structure-Activity Relationship
   REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
   REL: Recommended Exposure Limit
   RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
   SCL: Specific Concentration Limit
   SDS: Safety Data Sheet
   STEL: Short Term Exposure Limit
   STOT RE: Specific Target Organ Toxicity, Repeated Exposure
   STOT SE: Specific Target Organ Toxicity, Single Exposure
   TDG: Transportation of Dangerous Goods (Canada)
   TWA: Time Weighted Average
   US DOT: United States Department of Transportation
   vPvB: very Persistent and very Bioaccumulative substance
   WEL: Workplace Exposure Limit
   WHMIS: Workplace Hazardous Materials Information System
   Other abbreviations and acronyms can be looked up at www.wikipedia.org.
### Key literature references and sources for data:
- Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
- Chemical Classification and Information Database (CCID)
- European Chemicals Agency (ECHA) - Information on Chemicals
- Hazardous Chemical Information System (HCIS)
- National Institute of Technology and Evaluation (NITE)
- Swedish Chemicals Agency (KEMI)
- U.S. National Library of Medicine Toxicology Data Network (TOXNET)

### Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1, H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 3, H412</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

**Relevant H-statements:**
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H411: Toxic to aquatic life with long lasting effects.

**Hazard pictogram names:** Exclamation mark

**Further information:** None

**Date of last revision:** 5 December 2023

**Changes to the SDS in this revision:** Section 1.1.

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user’s particular purpose. The user must make their own determination as to suitability.