



**SAFETY DATA SHEET**  
**Nickel Chromium (pieces)**

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

**1. Identification**

**Product identifier**

**Product name**                      Nickel Chromium (pieces)

**Internal identification**              Replaces M-2710-030

**Recommended use of the chemical and restrictions on use**

**Application**                              Exterior surface coating.

**Uses advised against**              No specific uses advised against are identified.

**Details of the supplier of the safety data sheet**

**Supplier**                                  Kurt J Lesker Company

**Manufacturer**                          Kurt J Lesker Company  
 1925 Route 51  
 Jefferson Hills, PA 15025  
 +1 412-387-9200

Kurt J Lesker Company LTD  
 United Kingdom  
 15-16 Burgess Road  
 Hastings, East Sussex, TN35 4NR  
 England  
 Customer Service: +44 (0) 1424 458100  
 msds@lesker.com

**Emergency telephone number**

**Emergency telephone**              North America [USA, Canada, Mexico]: 1-866-519-4752  
 Mainland China: (+86) 4001 2001 74  
 Europe: {int'l call prefix}-1-760-476-3961  
 Asia Pacific: {int'l call prefix}-1-760-476-3960  
 Middle East & Africa: {int'l call prefix}-1-760-476-3959

Access Code - 333594

**2. Hazard(s) identification**

**Classification of the substance or mixture**

**Physical hazards**                      Not Classified

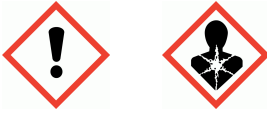
**Health hazards**                        Skin Sens. 1 - H317 Carc. 2 - H351 STOT RE 1 - H372

**Environmental hazards**              Not Classified

**Label elements**

## Nickel Chromium (pieces)

### Pictogram



### Signal word

Danger

### Hazard statements

H317 May cause an allergic skin reaction.  
 H351 Suspected of causing cancer.  
 H372 Causes damage to organs through prolonged or repeated exposure.

### Precautionary statements

P260 Do not breathe vapor/ spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P308+P313 If exposed or concerned: Get medical advice/ attention.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

### Contains

Nickel (pieces)

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

## 3. Composition/information on ingredients

### Mixtures

<b>Chromium (pieces)</b> CAS number: 7440-47-3	<b>0 - 100%</b>
<b>Classification</b> Not Classified	
<b>Nickel (pieces)</b> CAS number: 7440-02-0	<b>0 - 100%</b>
<b>Classification</b> Skin Sens. 1 - H317 Carc. 2 - H351 STOT RE 1 - H372	

The full text for all hazard statements is displayed in Section 16.

## 4. First-aid measures

### Description of first aid measures

#### General information

Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

#### Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

#### Ingestion

Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

## Nickel Chromium (pieces)

**Skin Contact** It is important to remove the substance from the skin immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognized skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.

**Eye contact** Rinse with water. Get medical attention if any discomfort continues.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

### Most important symptoms and effects, both acute and delayed

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.

**Ingestion** May cause sensitization or allergic reactions in sensitive individuals. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.

**Skin contact** May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.

**Eye contact** No specific symptoms known. May be slightly irritating to eyes.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### Special hazards arising from the substance or mixture

**Specific hazards** None known.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

## Nickel Chromium (pieces)

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Avoid contact with skin and eyes.

### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Suspected of causing cancer. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

**Storage class** Chemical storage.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

## 8. Exposure controls/Personal protection

### Control parameters

#### Occupational exposure limits

##### **Chromium (pieces)**

Long-term exposure limit (8-hour TWA): ACGIH 0.05 mg/m<sup>3</sup>

A4

Long-term exposure limit (8-hour TWA): OSHA 1 mg/m<sup>3</sup>

as Cr

##### **Nickel (pieces)**

Long-term exposure limit (8-hour TWA): OSHA 1 mg/m<sup>3</sup>

as Ni

Long-term exposure limit (8-hour TWA): ACGIH 1.5 mg/m<sup>3</sup> inhalable fraction

A5

## Nickel Chromium (pieces)

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

A5 = Not Suspected as a Human Carcinogen.

### Chromium (pieces) (CAS: 7440-47-3)

**Immediate danger to life and health** 250 mg/m<sup>3</sup>

### Nickel (pieces) (CAS: 7440-02-0)

**Immediate danger to life and health** 10 mg/m<sup>3</sup>

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

#### Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

#### Other skin and body protection

May cause skin sensitization or allergic reactions in sensitive individuals. Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### Hygiene measures

Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

#### Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

#### Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance** Solid.

## Nickel Chromium (pieces)

<b>Color</b>	Various colors.
<b>Odor</b>	No characteristic odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	Not available.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Bulk density</b>	Not available.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Molecular weight</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	No potentially hazardous reactions known.
<b>Conditions to avoid</b>	There are no known conditions that are likely to result in a hazardous situation.
<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity - oral

## Nickel Chromium (pieces)

<b>Notes (oral LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Acute toxicity - dermal</u></b>	
<b>Notes (dermal LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Acute toxicity - inhalation</u></b>	
<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitization</u></b>	
<b>Respiratory sensitization</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitization</u></b>	
<b>Skin sensitization</b>	May cause skin sensitization or allergic reactions in sensitive individuals.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>IARC carcinogenicity</b>	None of the ingredients are listed or exempt.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Not classified as a specific target organ toxicant after a single exposure.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	STOT RE 1 - H372
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Not relevant. Solid.
<b><u>General information</u></b>	
<b>General information</b>	May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	No specific symptoms known.
<b>Ingestion</b>	May cause sensitization or allergic reactions in sensitive individuals.
<b>Skin Contact</b>	May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	No specific symptoms known.
<b>Route of exposure</b>	Ingestion Inhalation Skin and/or eye contact
<b>Target Organs</b>	No specific target organs known.
<b>Medical considerations</b>	Skin disorders and allergies.

## Nickel Chromium (pieces)

### 12. Ecological information

<b>Ecotoxicity</b>	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
<b>Toxicity</b>	Based on available data the classification criteria are not met.
<b><u>Persistence and degradability</u></b>	
<b>Persistence and degradability</b>	The degradability of the product is not known.
<b><u>Bioaccumulative potential</u></b>	
<b>Bio-Accumulative Potential</b>	No data available on bioaccumulation.
<b>Partition coefficient</b>	Not applicable.
<b><u>Mobility in soil</u></b>	
<b>Mobility</b>	No data available.
<b><u>Other adverse effects</u></b>	
<b>Other adverse effects</b>	None known.

### 13. Disposal considerations

#### **Waste treatment methods**

<b>General information</b>	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
<b>Disposal methods</b>	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

### 14. Transport information

<b>General</b>	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
<b><u>UN Number</u></b>	
<b>UN No. (International)</b>	Not applicable.
<b><u>UN proper shipping name</u></b>	
<b>Proper shipping name (International)</b>	Not applicable.
<b><u>Transport hazard class(es)</u></b>	
<b>Transport Labels (International)</b>	No transport warning sign required.
<b><u>Packing group</u></b>	
<b>Packing group (International)</b>	Not applicable.
<b><u>Environmental hazards</u></b>	



## Nickel Chromium (pieces)

### Environmentally Hazardous Substance

No.

### Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

## 15. Regulatory information

### US Federal Regulations

#### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

#### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

#### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

#### SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

#### CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

#### FDA - Essential Chemical

None of the ingredients are listed or exempt.

#### FDA - Precursor Chemical

None of the ingredients are listed or exempt.

#### SARA (311/312) Hazard Categories

The following ingredients are listed or exempt:

*Nickel (pieces)*

Chronic

#### OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

### US State Regulations

#### California Proposition 65 Carcinogens and Reproductive Toxins

WARNING



Cancer and Reproductive harm - [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

*Nickel (pieces)*

Carcinogen.

Developmental toxin.

#### California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

## Nickel Chromium (pieces)

### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

### California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

### Massachusetts "Right To Know" List

None of the ingredients are listed or exempt.

### Rhode Island "Right To Know" List

None of the ingredients are listed or exempt.

### Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

### New Jersey "Right To Know" List

None of the ingredients are listed or exempt.

### Pennsylvania "Right To Know" List

None of the ingredients are listed or exempt.

### Inventories

#### US - TSCA

None of the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

### 16. Other information

<b>Training advice</b>	Only trained personnel should use this material.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Issued by</b>	HS&E Manager.
<b>Revision date</b>	8/31/2018
<b>Revision</b>	5
<b>Supersedes date</b>	8/31/2018
<b>SDS No.</b>	4652
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. H372 Causes damage to organs through prolonged or repeated exposure. H372 Causes damage to organs (Lungs, Respiratory tract) through prolonged or repeated exposure.
<b>End of SDS</b>	_____

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.