



## SAFETY DATA SHEET

### Halar 6514

#### 1. Identification

##### Product identifier

**Product name** Halar 6514  
**Product number** HALAR-6514-25KG

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

**Application** Industrial use.  
**Uses advised against** This product is designed for use by technically competent persons. Any use of this product, other than for its stated use, should not be attempted without expert review.

##### 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  
 Austin House  
 Sidney Little Road  
 Churchfields Industrial Estate  
 St Leonards on Sea, East Sussex, TN38 9PU, United Kingdom  
 Customer Service: +44 (0) 1424 458100  
 msds@lesker.com

##### Emergency telephone number

**Emergency telephone** Emergency Numbers  
 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  
 South Korea: +080-880-0455  
 Philippines: (+63) 2 83953471

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Combustible Dust - USH01  
**Health hazards** Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 1B - H350  
**Environmental hazards** Aquatic Acute 2 - H401

##### Label elements

## Halar 6514

### Hazard symbols



### Signal word

Danger

### Hazard statements

USH01 May form combustible dust concentrations in air.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 May cause an allergic skin reaction.  
 H350 May cause cancer.  
 H401 Toxic to aquatic life.

### Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.  
 P261 Avoid breathing dust.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P284 In case of inadequate ventilation wear respiratory protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 P308+P313 If exposed or concerned: Get medical advice/ attention.  
 P342+P311 If experiencing respiratory symptoms: Call a poison center/ doctor.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P405 Store locked up.  
 P501 Dispose of contents/ container in accordance with national regulations.

### Contains

Cobalt Oxide (powder and pieces)

### 3. Composition/information on ingredients

#### Mixtures

1-chloro-1,2,2-trifluoroethene, ethene, 3,3,3-trifluoro-2-(trifluoromethyl)prop-1-ene	79%
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CAS number: 54302-04-4

Cobalt Oxide	20%
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CAS number: 1308-06-1

Cobalt Oxide (powder and pieces)	1.0%
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CAS number: 1307-96-6

### Composition comments

\*The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

### 4. First-aid measures

#### Description of first aid measures

#### Inhalation

Move affected person to fresh air at once. If breathing stops, provide artificial respiration. If in doubt, get medical attention promptly. Keep affected person under observation. Remove affected person from source of contamination. Symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

#### Ingestion

Get medical attention if a large quantity has been ingested. Never give anything by mouth to an unconscious person.

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**Skin Contact** Remove contamination with soap and water or recognized skin cleansing agent. In case of possible exposure to degradation products, use suitable respiratory protection. If calcium gluconate gel is available, rub it into affected skin. Consult a physician for specific advice.

**Eye contact** Continue to rinse for at least 15 minutes and get medical attention.

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

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

**Inhalation** Irritating to respiratory system. May cause coughing and difficulties in breathing. Headache. Consult a physician for specific advice.

**Ingestion** This is unlikely to occur but symptoms similar to those of ingestion may develop.

**Skin contact** Irritating to skin. Powder may irritate skin. Prolonged contact may cause redness, irritation and dry skin.

**Eye contact** Continue to rinse for at least 15 minutes and get medical attention.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** The product is not flammable. Extinguish with foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** None known.

#### Special hazards arising from the substance or mixture

**Hazardous combustion products** Corrosive gases or vapors. Hydrogen chloride (HCl). Hydrogen fluoride (HF).

#### Advice for firefighters

**Protective actions during firefighting** Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. No action shall be taken without appropriate training or involving any personal risk. Avoid dust formation. Based on available knowledge of this material, it has been determined to be non-hazardous and will not pose a risk to persons or the environment in its provided form. However, any cutting, welding, melting, grinding, or use for deposition will produce dust, fume, or particulates containing component elements of this material. Exposure to these components may present significant health hazards. Note: Fine particulate may be a combustible dust which, when dispersed in air, may present an explosion hazard.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**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.

#### 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

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<b>Methods for cleaning up</b>	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. Avoid generation and spreading of dust. Avoid spreading dust or contaminated materials.
<b>Reference to other sections</b>	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

<b>Usage precautions</b>	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. 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. Static electricity and formation of sparks must be prevented. Ground/bond container and receiving equipment. Dust may form explosive mixture with air.
<b>Advice on general occupational hygiene</b>	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Provide eyewash station and safety shower.

#### Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Avoid dust formation. Do not store near heat sources or expose to high temperatures.
<b>Storage class</b>	Chemical storage.

### 8. Exposure controls/Personal protection

<b>Ingredient comments</b>	No exposure limits known for ingredient(s).
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#### Exposure controls

##### Protective equipment



<b>Appropriate engineering controls</b>	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.
<b>Eye/face protection</b>	Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Dust-resistant, chemical splash goggles. Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated.

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<b>Hand protection</b>	Wear protective gloves. 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.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of skin contact.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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.
<b>Environmental exposure controls</b>	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

<b>Appearance</b>	Solid. Powder.
<b>Color</b>	Black.
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point</b>	220°C/428°F
<b>Initial boiling point and range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	The product is not flammable.
<b>Upper/lower flammability or explosive limits</b>	Data lacking.
<b>Other flammability</b>	May form combustible dust concentrations in air.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Bulk density</b>	> 1.65 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Data lacking.

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<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	300°C/572°F
<b>Viscosity</b>	Not applicable.
<b>Explosive properties</b>	Dust may form explosive mixture with air.
<b>Oxidizing properties</b>	Does not meet the criteria for classification as oxidizing.
<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.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, no hazardous reactions will occur. Based on available knowledge of this material, it has been determined to be non-hazardous and will not pose a risk to persons or the environment in its provided form. However, any cutting, welding, melting, grinding, or use for deposition will produce dust, fume, or particulates containing component elements of this material. Exposure to these components may present significant health hazards. Note: Fine particulate may be a combustible dust which, when dispersed in air, may present an explosion hazard.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
<b>Materials to avoid</b>	Alkali metals. Avoid contact with flammable/combustible materials. Oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Hydrogen chloride (HCl). Hydrogen fluoride (HF). Phosgene (COCl <sub>2</sub> ). The release of other hazardous decomposition products is possible.

### 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Acute Tox. 4

**ATE oral (mg/kg)** 50,000.0

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitization

**Respiratory sensitization** Resp. Sens. 1B

#### Skin sensitization

**Skin sensitization** Skin Sens. 1 - H317

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### Germ cell mutagenicity

**Genotoxicity - in vitro** Positive.

**Genotoxicity - in vivo** Based on available data the classification criteria are not met.

### Carcinogenicity

**IARC carcinogenicity** IARC Group 2B Possibly carcinogenic to humans.

**NTP carcinogenicity** Not listed.

**OSHA Carcinogenicity** Not listed.

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Does not contain any substances known to be toxic to reproduction.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure

**Summary** Causes damage to organs (Respiratory system, lungs) through prolonged or repeated exposure if inhaled.

**STOT - repeated exposure** STOT RE = Specific target organ toxicity-repeated exposure

**Target organs** Respiratory system, lungs

### Aspiration hazard

**Aspiration hazard** Not relevant.

## 12. Ecological information

**Ecotoxicity** The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### Acute aquatic toxicity

**Acute toxicity - fish** Not available.

**Acute toxicity - aquatic invertebrates** Not available.

**Acute toxicity - aquatic plants** Not available.

**Acute toxicity - microorganisms** EC<sub>50</sub>, 30 hour: 120 mg/l, Activated sludge  
EC<sub>0</sub>, 30 hour: 3.73 mg/l, Activated sludge

**Acute toxicity - terrestrial** Not available.

### Chronic aquatic toxicity

**Summary** No data available.

### Persistence and degradability

**Persistence and degradability** No data available.

**Phototransformation** No significant reaction in water.

**Biodegradation** Not applicable.  
Substance is inorganic.

### Bioaccumulative potential

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**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** Data lacking.

### Mobility in soil

**Mobility** Mobile.

**Adsorption/desorption coefficient** Highly mobile.

### Other adverse effects

**Other adverse effects** Not available.

## 13. Disposal considerations

### Waste treatment methods

**General information** 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.

**Disposal methods** Dispose of waste via a licensed waste disposal contractor.

## 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**Road transport notes** Not regulated.

**Rail transport notes** Not regulated.

**Sea transport notes** Not regulated.

**Air transport notes** Not regulated.

**DOT transport notes** Not regulated.

### UN Number

**UN No. (International)** Not applicable.

### UN proper shipping name

**Proper shipping name (International)** Not applicable.

### Transport hazard class(es)

**Transport Labels (International)** No transport warning sign required.

### Transport labels

No transport warning sign required.

### DOT transport labels

No transport warning sign required.

### Packing group

**Packing group (International)** Not applicable.

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### Environmental hazards

#### Environmentally Hazardous Substance

No.

#### Special precautions for user

Not applicable.

DOT TIH Zone Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### 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

Present.

Some 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

Combustible Dust  
Respiratory or skin sensitization  
Carcinogenicity

##### OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

#### US State Regulations

##### California Proposition 65 Carcinogens and Reproductive Toxins

WARNING



This product can expose you to Cobalt Oxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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### California Proposition 65 Labelling



WARNING This product can expose you to Cobalt Oxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

None of the ingredients are listed or exempt.

#### 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.

### Label Prop 65 data

#### Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

#### Pennsylvania "Right To Know" List

Some of the ingredients are listed or exempt.

#### New Jersey "Right To Know" List

Some of the ingredients are listed or exempt.

### Inventories

#### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

#### Canada - DSL/NDSL

Some of the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

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

None of the ingredients are listed or exempt.

#### Australia - AICS

All the ingredients are listed or exempt.

#### Japan - ENCS

All the ingredients are listed or exempt.

#### Korea - KECI

All the ingredients are listed or exempt.

#### China - IECSC

All the ingredients are listed or exempt.

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**Philippines - PICCS**

Some of the ingredients are listed or exempt.

**New Zealand - NZIOC**

All the ingredients are listed or exempt.

**Taiwan - TCSI**

All the ingredients are listed or exempt.

**16. Other information**

**Revision date** 6/30/2022

**Revision** 2

**Supersedes date** 6/29/2022

**SDS No.** 5998

**Hazard statements in full** H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H350 May cause cancer.  
H401 Toxic to aquatic life.  
USH01 May form combustible dust concentrations in air.

**End of SDS**