



SAFETY DATA SHEET

Halar 350LC

1. Identification

Product identifier

Product name Halar 350LC
Product number HALAR-350LC-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
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 Jefferson Hills, PA 15025
 +1 412-387-9200

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 Sidney Little Road
 Churchfields Industrial Estate
 St Leonards on Sea, East Sussex, TN38 9PU, United Kingdom
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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 Not Classified

Environmental hazards Not Classified

Label elements

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Signal word	Warning
Hazard statements	USH01 May form combustible dust concentrations in air.

Other hazards

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.

3. Composition/information on ingredients

Mixtures

Ethylene-chlorotrifluoroethylene copolymer	100%
CAS number: 25101-45-5	

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. Do not induce vomiting unless under the direction of medical personnel. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Skin Contact	Wash skin thoroughly with soap and water or use an approved skin cleanser. Wash contaminated clothing before reuse. Cool skin rapidly with cold water after contact with hot polymer. Do not peel polymer from the skin. Get medical attention.
Eye contact	Rinse with water. 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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	Prolonged contact may cause dryness of the skin. Contains components which may penetrate the skin. May cause defatting of the skin but is not an irritant. Mild dermatitis, allergic skin rash.
Eye contact	No specific symptoms known. Causes eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

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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.

Special hazards arising from the substance or mixture

Specific hazards Combustible Material In a fire, the polymer melts, producing droplets which may propagate fire. Heating may cause a fire or explosion.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Carbon dioxide (CO₂). Carbon monoxide (CO). Toxic 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

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. Contact with hot product can cause serious thermal burns. For personal protection, see Section 8. Avoid dust formation.

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. Avoid generation and spreading of dust. Avoid spreading dust or contaminated materials.

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

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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. 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. Avoid generation and spreading of dust. Avoid inhalation of vapors and contact with skin and eyes. Avoid release to the environment. Ground container and transfer equipment to eliminate sparks from static electricity. In case of insufficient ventilation, wear suitable respiratory equipment.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.
<u>Conditions for safe storage, including any incompatibilities</u>	
Storage precautions	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.
Storage class	Chemical storage.
<u>Specific end uses(s)</u>	
Specific end use(s)	The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Ingredient comments	No exposure limits known for ingredient(s).
<u>Exposure controls</u>	
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: Dust-resistant, chemical splash goggles. Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated.
Hand protection	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.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of 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.

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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.
Thermal hazards	If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures.
Environmental exposure controls	Keep container tightly sealed when not in use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Solid. Pellets.
Color	White.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable.
Melting point	446°C/230°F
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not determined.
Evaporation factor	Not available.
Flammability (solid, gas)	The product is not flammable. Dust may form explosive mixture with air.
Upper/lower flammability or explosive limits	Data lacking.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Data lacking.
Bulk density	~ 1.65 g/cm ³
Solubility(ies)	Insoluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Data lacking.
Decomposition Temperature	300°C/572°F
Viscosity	Not applicable.
Oxidizing properties	There are no chemical groups present in the product that are associated with oxidizing properties.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known. Will not polymerize.
Conditions to avoid	Avoid generation and spreading of dust. Avoid heat, flames and other sources of ignition. Avoid heat, flames and other sources of ignition.
Materials to avoid	Flammable/combustible materials. Alkali metals.
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Carbon dioxide (CO ₂). Carbon dioxide (CO ₂). Hydrogen chloride (HCl). Hydrogen fluoride (HF).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) No specific test data are available.

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation No specific test data are available.

Serious eye damage/irritation

Serious eye damage/irritation No specific test data are available.

Respiratory sensitization

Respiratory sensitization No specific test data are available.

Skin sensitization

Skin sensitization No specific test data are available.

Germ cell mutagenicity

Genotoxicity - in vitro No specific test data are available.

Genotoxicity - in vivo No specific test data are available.

Carcinogenicity

Carcinogenicity No specific test data are available.

IARC carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP carcinogenicity

Carcinogenicity in humans is not expected.

OSHA Carcinogenicity

Carcinogenicity in humans is not expected.

Reproductive toxicity

Reproductive toxicity - fertility No specific test data are available.

Reproductive toxicity - development No specific test data are available.

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Specific target organ toxicity - single exposure

STOT - single exposure No specific test data are available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No specific test data are available.

Aspiration hazard

Aspiration hazard No data available.

12. Ecological information

Acute aquatic toxicity

Acute toxicity - fish No specific test data are available.

Acute toxicity - aquatic invertebrates Not available.

Acute toxicity - aquatic plants Not available.

Acute toxicity - microorganisms Not available.

Acute toxicity - terrestrial Not available.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage Not available.

Short term toxicity - embryo and sac fry stages Not available.

Persistence and degradability

Persistence and degradability No data available.

Phototransformation No specific test data are available.

Stability (hydrolysis) No specific test data are available.

Biodegradation No specific test data are available.

Biological oxygen demand No specific test data are available.

Chemical oxygen demand No specific test data are available.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not applicable.

Mobility in soil

Mobility No data available.

Adsorption/desorption coefficient No specific test data are available.

Henry's law constant No specific test data are available.

13. Disposal considerations

Waste treatment methods

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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 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

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.
<u>UN Number</u>	
UN No. (International)	Not applicable.
UN No. (DOT)	Not applicable.
<u>UN proper shipping name</u>	
Proper shipping name (International)	Not applicable.
Proper shipping name (DOT)	Not applicable.
<u>Transport hazard class(es)</u>	
Transport Labels (International)	No transport warning sign required.
DOT transport labels	
No transport warning sign required.	
<u>Packing group</u>	
Packing group (International)	Not applicable.
DOT packing group	Not applicable.
<u>Environmental hazards</u>	
Environmentally Hazardous Substance	
No.	
<u>Special precautions for user</u>	
Not applicable.	
DOT reportable quantity	Not applicable.
DOT TIH Zone	Not applicable.

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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
Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.

SARA 313 Emission Reporting
Not listed.

SARA (311/312) Hazard Categories
Combustible Dust

OSHA Highly Hazardous Chemicals
Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
Not listed.

Label Prop 65 data

Inventories

EU - EINECS/ELINCS
All the ingredients are listed or exempt.

Canada - DSL/NDSL
All the ingredients are listed or exempt.

US - TSCA
All components of this product are included in inventory, exempt, or notified

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

All the ingredients are listed or exempt.

16. Other information

Revision date	6/30/2022
Revision	4
Supersedes date	6/22/2022
SDS No.	5992
Hazard statements in full	USH01 May form combustible dust concentrations in air.
End of SDS	