

SAFETY DATA SHEET

EL™2007 Non-Flammable Duster Aerosol

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013

Section 1. Identification

Product code : SC2007000
GHS product identifier : EL™2007 Non-Flammable Duster Aerosol
Product use : Industrial applications, Used by spraying.
Material uses : Paint or paint related material.
CAS number : 811-97-2
EC number : 212-377-0

Details of the supplier of the safety data sheet

THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Supplier Telephone number : (216) 566-2902
e-mail address of person responsible for this SDS : MSDS@sherwin.com

Emergency telephone number (with hours of operation) : 400-6267911 (24/7)
Hours of operation : Emergency contact available 24 hours a day

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview

Liquid.

Pressurized container: may burst if heated.
Harms public health and the environment by destroying ozone in the upper atmosphere.

See Section 12 for environmental precautions.

Classification of the substance or mixture : AEROSOLS - Category 3
HAZARDOUS TO THE OZONE LAYER - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Pressurized container: may burst if heated.
Harms public health and the environment by destroying ozone in the upper atmosphere.

Date of issue/Date of revision : 2020/04/01. **Date of previous issue** : 2019/11/29.

Version : 3.01 1/14

SHW-A4-AP-GH432-CN

Section 2. Hazards identification

Precautionary statements

- Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use.
- Response** : Not applicable.
- Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- Disposal** : Refer to manufacturer or supplier for information on recovery or recycling.

Physical and chemical hazards : No known significant effects or critical hazards.

Health hazards : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Environmental hazards : Pressurized container: may burst if heated. Harms public health and the environment by destroying ozone in the upper atmosphere.

Other hazards which do not result in classification : Please refer to the SDS for additional information.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

CAS number : 811-97-2

EC number : 212-377-0

Hazardous ingredients

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number	EC number	Hazard classification
1,1,1,2-Tetrafluoroethane	100.0	811-97-2	212-377-0	H280, H420 See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
redness

SC2007000

EL™ 2007 Non-Flammable Duster Aerosol

Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, carbon dioxide, powders.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds

Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Section 6. Accidental release measures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Reference to other sections** : See Section 7 of the safety data sheet (technical measures). See Section 8 for information on appropriate personal protective equipment.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Section 7. Handling and storage

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
1,1,1,2-Tetrafluoroethane	GBZ 2.1 (China, 4/2007). PC-TWA: 2 mg/m ³ , (as F) 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : 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.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Use safety eyewear designed to protect against splash of liquids.
- Skin protection**
- Hand protection** : Wear suitable gloves tested to EN374.
- Gloves** : Short Term Exposure less than 10 minutes Continuous use Nitrile gloves.
Hazardous ingredients Section 3 For more than 4 hours of protection in the presence of Ethyl methyl ketone or Methyl ethyl ketone Acetone or Methyl isobutyl ketone Butyl gloves 0.7mm For more than 4 hours of protection in the presence of Aromatic solvent use polyvinyl alcohol (PVA) gloves.
Long Term Exposure Spill / For prolonged or repeated handling, use PE / PE Laminate gloves > 8 hours (breakthrough time) .
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Section 8. Exposure controls/personal protection

	The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Body protection	: Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Solvent.
Odor threshold	: Not available.
pH	: Testing not technically possible.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: >94°C (>201.2°F)
Evaporation rate	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: 101.3 kPa (760 mm Hg) [at 20°C]
Vapor density	: 3.18 [Air = 1]
Relative density	: 1.2
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): <0.205 cm ² /s (<20.5 cSt)
VOC content	: 1204 g/L
<u>Aerosol product</u>	
Type of aerosol	: Spray
Heat of combustion	: 0 kJ/g

SC2007000

EL™ 2007 Non-Flammable Duster Aerosol

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame).
: Avoid high temperature.

Incompatible materials : No specific data.

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,1,1,2-Tetrafluoroethane	LC50 Inhalation Vapor	Rat	1500 g/m ³	4 hours

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

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Section 11. Toxicological information

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Not available.

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

SC2007000

EL™ 2007 Non-Flammable Duster Aerosol

Section 12. Ecological information

Toxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.





Other adverse effects : No known significant effects or critical hazards.

Do not allow to enter drains or watercourses.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	China	ADR	IMDG	IATA
UN number	UN3159	UN3159	UN3159	UN3159
UN proper shipping name	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane
Transport Hazard Class(es)/Label(s)	2.2 	2 	2.2 	2.2 
Packing group	-	-	-	-
Environmental hazards/Marine pollutant	No.	No.	No.	No.

Additional information

China : **Emergency schedules** F-C, S-V

Section 14. Transport information

ADR : **Tunnel code** C/E
IMDG : **Emergency schedules** F-C, S-V

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Section 15. Regulatory information

National inventory : **Australia inventory (AICS):** All components are listed or exempted.
Canada inventory: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Europe inventory: All components are listed or exempted.
Japan inventory (ENCS): All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Mexico inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Thailand inventory: Not determined.
Turkey inventory: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.
Vietnam inventory: All components are listed or exempted.

List of Goods banned for Importing

None of the components are listed.

Inventory of Hazardous Chemicals

None of the components are listed.

List of Goods banned for Exporting

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

Inventory of Highly Toxic Chemicals

None of the components are listed.

Catalogue of Hazardous Chemicals of Priority Management

None of the components are listed.

SC2007000

EL™ 2007 Non-Flammable Duster Aerosol

Section 16. Other information

History

Date of printing	: 2020/04/01.
Date of issue/Date of revision	: 2020/04/01.
Date of previous issue	: 2019/11/29.
Version	: 3.01
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification	
Classification	Justification
AEROSOLS - Category 3	On basis of test data
HAZARDOUS TO THE OZONE LAYER - Category 1	Calculation method

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

Full text of classifications [CLP/GHS]	: AEROSOLS - Category 3 HAZARDOUS TO THE OZONE LAYER - Category 1
Full text of abbreviated H statements	: H229 - Pressurized container: may burst if heated. H420 - Harms public health and the environment by destroying ozone in the upper atmosphere.
Precautionary statements	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 - Do not pierce or burn, even after use. P410 - Protect from sunlight. P412 - Do not expose to temperatures exceeding 50 °C/122 °F. P502 - Refer to manufacturer or supplier for information on recovery or recycling.

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written

Section 16. Other information

handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Section 16. Other information