Standard Brands (Ireland) Ltd.
Material Safety Data Sheet
Soot Reducer

CONFIDENTIAL INFORMATION
STANDARD BRANDS (IRELAND) LTD.
DATE 19 MAY 2020.
COMPLIANT WITH EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010.

SOOT REDUCER

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	SOOT REDUCER.
CAS No.	Mixture.
EINECS No.	Mixture.
REACH Registration No.	None assigned.

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

Identified use(s)	Soot reducer for domestic use. Before lighting, the product is placed (in the unopened sachet) in the appliance.
Uses advised against	Only use for the intended purpose. Do not open the bag.

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer	Standard Brands (Ireland) Ltd. Castlebellingham County Louth Ireland
	Tel. ++353 42 9372140 Fax. ++353 42 9372218
Email (Competent Person)	fvernon@standardbrands.net

1.4 Emergency telephone number

Ireland Contact	00353 42 9372140 09.00 – 17.00 Monday – Friday.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

Harmful if swallowed.
Causes serious eye damage.
Toxic to aquatic life with long lasting effects.

2.1.2 Directive 67/548/EEC & Directive 1999/45/EC Harmful.
Irritant.
Dangerous for the environment.

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP).

Product Name Soot Reducer.

Hazard Pictogram



Signal word(s) Danger

Hazard statement(s)
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains Contains Ammonium Chloride (EC No. 235-186-4), Copper (II) Chloride (EC No. 231-210-2).

2.3 Other hazards The sachet should not be opened. From the sealed foil pouch no danger is expected. Hazards only exist when the powder is released from the sachet.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Substances in preparations/mixtures.

3.2 Mixtures

EC Classification No. 1272/2008

Ammonium chloride <90%	CAS No.: 12125-02-9 EC No.: 235-186-4 Classification - H302, H319.
Copper II chloride <6%	CAS No.: 10125-13-0 EC No.: 231-210-2 Classification - H302, H315, H318, H400, H410.

3.3 Additional Information None.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician. In case of shortness of breath: inhale oxygen. Put victim at rest, cover with a blanket and keep warm. Inhale as soon as possible a glucocorticoid metered dose inhaler. Seek medical advice.

Ingestion

In case of retained consciousness: immediately drink plenty of liquid (water). Rinse mouth. Give activated carbon (3 tablespoons in a glass of water). Drink milk. Induce vomiting. Seek medical advice. Symptoms of poisoning may even occur later.

Skin contact

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

Eye contact

In case of contact with eyes, rinse immediately (and under protection of the uninjured eye) with plenty of flowing water for 10 minutes, holding eyelids wide apart. Remove contact lenses. In case of persistent symptoms, consult an ophthalmologist.

4.2 Most important symptoms and effects, both acute and delayed

Acute: Slight irritation of the mucous membranes and respiratory tract, coughing, shortness of breath.

After skin contact: slight irritation; Following eye contact: irritation; after ingestion: irritation mucous membrane irritation.

After ingestion of large quantities: headache, nausea, vomiting, diarrhea, hypotension, loss of consciousness, disturbances of the central nervous system.

4.3 Indication of any immediate medical attention and special treatment needed

Symptoms of acute poisoning:
Commercially relevant is - almost exclusively - the topical effect: Mucosal irritation, less irritation with skin contact.

Effects on eye: conjunctivitis, corneaerosion, lacrimation, blepharospasm.

After inhalation: salivation, cough, bronchitis, glottis or pulmonary edema only after massive inhalation.

Dermal effects: development of a moderately strong efflorescence of an irritant dermatitis.

Oral intake causes burning and redness of the oral cavity and pharynx in the sense of local irritant effects. Resorptive poisoning is extremely unlikely in the workplace, they may accidentally occur only if the substance is taken orally and is not eliminated by spontaneous vomiting. Then typical symptoms of the decrease in alkaline reserve (acidosis) are developed: disorientation, nausea, vomiting, highly acidic urine, tachypnea, cyanosis, hypereflexia, followed by areflexia, coma and respiratory acidosis. The alternative systemic form of intoxication, the ammonia poisoning with pre-existing liver disease (cirrhosis), is probably impossible.

Instructions for first medical aid:

Rinse affected eye, primary care by physician and further ophthalmic treatment. Wash contaminated skin with water, use glucocorticoid.

After inhalation:

glucocorticoid (parenteral) and bronchitis / pneumonia prophylaxis. Only ingestion of massive doses requires therapeutic intervention: Dilution and adsorption in addition to elimination and introduction of treatment with acidosis. Inclusion of smaller amounts can successfully be treated by oral application of 4g of sodium bicarbonate. Overall, stationary monitoring of the acid-base balance, electrolytes and the kidney, liver and cardiovascular function is required after ingestion.

5. FIRE- FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media — Co-ordinate fire-fighting measures to the fire surroundings.

5.2 Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes. Hazardous fumes may contain: chlorine oxides, ammonia, copper oxides, hydrochloride (reacts with water to form hydrochloric acid) and chlorine.

5.3 Advice for fire-fighters

In case of fire: Wear self-contained breathing apparatus.
The material itself is not burning, apart from the sachet.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consider the usual precautions for handling chemicals.
Do not breathe dust. Avoid generation of dust.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Take up carefully when dry. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Consider protective measures given in section 8.
Disposal in accordance with section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling:

In case of dust generation: Keep away from sources of ignition. - No smoking.

Advice on protection against fire and explosion: Avoid generation of dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels storage class 10 - 13 (further distinction was not made because within storage classes 10 - 13 there are no legal restrictions on clustering.)

Advice on storage compatibility: Store in appropriately labelled and closed original containers. Protect from sunlight and heat sources.

7.3 Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 Occupational exposure limits

NAME	CAS NO.	mg/m^3	CATEGORY	ORIGIN
Ammonium chloride, fume.	12125-02-9	10 20	TWA (8 h) STEL (15 min)	WEL WEL

8.2 Exposure controls

Appropriate engineering controls

Wash hands before breaks and after work. When using do not eat or drink. Change contaminated clothing and clean it thoroughly. Personal protective equipment is only required when dealing with the liberated powder.

Protective and hygiene measures

Adequate eye protection must be worn. Framed glasses.

Eye/face protection

When protective gloves are used, the glove material has to be resistant to the substance. Before use, check leak tightness. Pre-clean gloves before taking them off, then keep them well ventilated. Pay attention to skin care. Suitable gloves.

The data is only valid for the pure compound ammonium chloride. Upon transfer to mixtures of substances they may be regarded only as a guide. If wearing of protective gloves is not possible for safety reasons (eg work on rotating machinery): Use skin protection cream. Consult company doctor for type of protection cream.

Hand protection

Required only at increased dust generation (tightly sealed, weak acid-resistant).

Skin protection

In exceptional situations (eg accidental release of substances, occupational exposure limit is exceeded) the wearing of respiratory protection is required. Note the wear time limits. Dust mask: Particle filter P2 or P3; identification colour: white.

Respiratory protection

Prevent entry into drains, the aquatic environment or soil. Danger to drinking water even at low levels in soil or the aquatic environment is possible. Appropriate authorities must be informed.

Environmental Exposure Controls

Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	solid.
Colour:	Greenish white.
Odour:	Odourless.
pH-Value (at 20 °C):	4,5-5,5 at 50 gm/l.
Melting point:	335°C.
Boiling point:	no data available
Flash point:	no data available.
Flammability	Solid: no data available.
Lower explosion limits:	no data available.
Upper explosion limits:	no data available.
Ignition temperature:	>400°C.
Auto-ignition temperature:	Solid: no data available.
Decomposition temperature:	no data available.
Vapour pressure: (at 30°C):	1,3 hPa.
Vapour pressure: (at 250°C)	67 hPa.
Density (at 20°C):	1,53 gm/cm³.
Bulk density:	600-900 kg/m³.
Water solubility:	374 gm/l.
Solubility in other solvents:	no data available.
Partition coefficient:	-4.37.

9.2. Other information

Data refers to Ammonium chloride.

10. STABILITY AND REACTIVITY

10.1. Reactivity No dangerous reactivity under regular conditions.

10.2. Chemical stability The product is stable under regular conditions.

10.3. Possibility of hazardous reactions No dangerous reactions to be expected if used properly. Reacts with oxidizing agents. Reacts with : Alkalis (alkalis).

10.4. Conditions to avoid Violent reaction with alkali metals, alkali metal hydroxides.
Explosion hazard with chlorine, chlorates, hydrogen cyanide, nitrates and nitrites.

10.5. Incompatible materials Avoid heat, sparks, open flames and other ignition sources.

10.6 Hazardous Decomposition Product(s)

Hydrochloride (reacts with water to form hydrochloric acid), Chlorine, chlorine oxides, ammonia, nitrogen oxides, Copper oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed.

ATEmix calculated ATE (oral) 1342,8 mg/kg.

Acute toxicity Ammonium chloride oral LD50 1440 mg/kg Rat.
Copper II chloride oral ATE 500 mg/kg.

Irritation and corrosivity Causes serious eye damage.
Slight irritations to the skin and the respiratory tract cannot be excluded.

Sensitising effects Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
For the ingredients copper(II)-chloride and ammonium chloride there is no evidence of carcinogenic, mutagenic and reproductive toxic effects.

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

Additional information on tests The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

11.2 Other information

Experiences with humans: mucous membrane irritation. For ammonium salts in general: local irritations, nausea, vomiting, diarrhea. After ingestion of large quantities: drop in blood pressure, collapse, CNS disorders, convulsions, narcosis, respiratory paralysis, haemolysis.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

For the pure ingredient ammonium chloride:

Toxic to fish from 0.3 mg/l. Toxic to fish food animals from 0.3 mg/l.

For the pure ingredient copper(II)-chloride:

Lethal to fish from 0.01 mg/l. Lethal to mussels from 0.55 mg/l/12h. Toxic to oysters from 0.1 mg/l.

12.2. Persistence and degradability No data available.

12.3. Bioaccumulative potential No data available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1. UN number:	UN 3077
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper dichloride-2-hydrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M7
Special Provisions:	274, 335, 601.
Limited quantity:	5 kg
Transport category:	3
Hazard No:	90
Tunnel restriction code:	E
Excepted Quantity:	E1

Maritime transport (IMDG)

14.1. UN number:	UN 3077
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper dichloride-2-hydrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Special Provisions:	274, 335, 966, 967.
Limited quantity:	5 kg
EmS:	F-A, S-F
Hazard No:	90
Excepted Quantity:	E1

Air transport (ICAO)

14.1. UN number:	UN 3077
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper dichloride-2-hydrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Special Provisions:	A97, A158, A179.
Limited quantity passenger:	30 kg G

14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS: yes.

14.6. Special precautions for user No special precautions known.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION

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

EU regulatory information

Additional information The relevant regulations have to be considered.

National regulatory information
Employment restrictions:

Observe employment restrictions for young people. Observe employment restrictions for pregnant and nursing mothers. Observe employment restrictions for women of child-bearing age.

Water contaminating class (D): 2 - water contaminating.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. OTHER INFORMATION

Full text of H statements referred to under Sections 2 and 3

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

The information given in this safety data sheet is to describe the product's safety regulations. The information in this safety data sheet is intended to be a guidance for safe handling, use, processing, storage, transportation, disposal and in case of spillages.