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1 Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: HL COIL BRITE

· Article number: 57014

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

No further relevant information available.

· Application of the substance / the preparation Acidic cleaner.

· 1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Highside Chemicals, Inc. 11114 Reichold Road Gulfport, MS 39503 USA Phone: (228) 896-9220

· 1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



R25: Toxic if swallowed.



C; Corrosive

R34: Causes burns.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05 GHS06

- · Signal word Danger
- · Hazard-determining components of labelling:

ammonium bifluoride sodium dodecyl sulphate

· Hazard statements

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P260 Do not breathe dust.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for P304+P340

breathing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

- · Hazard description:
- · WHMIS-symbols:

D1A - Very toxic material causing immediate and serious toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 3Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 1341-49-7 EINECS: 215-676-4	ammonium bifluoride T R25; C R34	>80%
Index number: 009-009-00-4		
CAS: 151-21-3 EINECS: 205-788-1	sodium dodecyl sulphate Xn R21/22; Xi R36/38	<10%
	① Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319	

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· 4.1 Description of first aid measures

· General information:

Involve doctor immediately. Symptoms, including pain, following any exposure may be delayed by as much as 24 hours.

Immediately remove any clothing soiled by the product.

Medical supervision for at least 48 hours.

Provide oxygen treatment if affected person has difficulty breathing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Do not use mouth to mouth or mouth to nose resuscitation.

Use a respiratory bag or breathing device.

· After skin contact:

Immediately rinse with water.

Rub in Ca-gluconate solution or Ca-gluconate gel immediately.

Seek immediate medical advice.

Seek immediate medical help for blistering or open wounds.

· After eye contact:

Protect unharmed eye.

Rinse opened eye for several minutes under running water.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

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Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

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· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Cramp

Nausea

Dizziness

Breathing difficulty

Coughing

Disorientation

Profuse sweating

Unconsciousness

Hazards

Danger of disturbed cardiac rhythm.

Danger of circulatory collapse.

Danger of convulsion.

Danger of pulmonary oedema.

Danger of impaired breathing.

Danger of gastric perforation.

· 4.3 Indication of any immediate medical attention and special treatment needed

Contains acidic fluoride salt. Consult literature for specific antidotes.

Monitor circulation, possible shock treatment.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary oedema.

Medical supervision for at least 48 hours.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Water in flooding quantities.

Foam

Alcohol resistant foam

Gaseous extinguishing agents

Limestone powder

- · For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

· Additional information

Evacuate area and fight fire from from the upwind side.

Cool endangered receptacles with water spray.

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No further relevant information available.

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6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Isolate area and prevent access.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Water + calcium oxide or calcium carbonate.

Dispose contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· 7.1 Precautions for safe handling

Use only in well ventilated areas.

Keep away from heat and direct sunlight.

Take note of emission threshold.

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

- · Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Store only in the original receptacle.

Use receptacles with fluoroplastic lining.

Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Do not store together with acids.

Protect from humidity and water.

Store away from oxidizing agents.

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Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

Protect from humidity and water.

Keep container tightly sealed.

· 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1341-49-7 ammonium bifluoride

IOELV (EU) Long-term value: 2,5 mg/m³

as F

PEL (USA) Long-term value: 2,5 mg/m³

as F

REL (USA) Long-term value: 2,5 mg/m³

as F

TLV (USA) Long-term value: 2,5 mg/m³

as F, BEI

EL (Canada) Long-term value: 2,5 mg/m³

as F

- · DNELs No further relevant information available.
- · PNECs No further relevant information available.
- · Ingredients with biological limit values:

1341-49-7 ammonium bifluoride

BEI (USA) 2 mg/L

Medium: urine

Time: prior to shift

Parameter: Fluoride (background, nonspecific)

3 mg/L

Medium: urine

Time: end of shift

Parameter: Fluoride (background, nonspecific)

· Additional information: The lists valid during the making were used as basis.

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- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:









Personal protective equipment must be selected to prevent inhalation of vapors and contact with skin and eyes. At a bare minimum, safety glasses, gloves, apron, and combination particle/vapor respirator should be worn. In some cases, supplied air, full body suits and boots will be needed.

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

· Respiratory protection:

Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the

preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

· Eye protection:

Contact lenses should not be worn.

Safety glasses

· Body protection:

Use protective suit.

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Boots



· Relative density

· Vapour density

Full head, face and neck protection

- Limitation and supervision of exposure into the environment No further relevant information available.
- · Risk management measures See Section 7 for additional information.

No further relevant information available.

 9.1 Information on basic physical General Information 	and chemical properties
· Appearance:	
Form:	Crystalline powder
Colour:	Pink
Odour:	Pungent
Odour threshold:	Not determined.
pH-value at 20 °C:	3-3,5
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable.
Density at 20 °C:	>1,1 g/cm³

Not determined.

Not applicable.

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• Evaporation rate Not applicable.

· Solubility in / Miscibility with

water: Soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

• 9.2 Other information No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with metals forming hydrogen.

Toxic fumes may be released if heated above the decomposition point.

Corrosive action on metals.

Violent reactions with strong alkalis and oxidizing agents.

Attacks materials containing glass and silicate.

Reacts with strong mineral acids forming hydrogen fluoride.

- · 10.4 Conditions to avoid Moisture.
- 10.5 Incompatible materials: Contact with acids liberates toxic gases.
- · 10.6 Hazardous decomposition products:

Hydrogen fluoride

Sulphur oxides (SOx)

Toxic metal oxide smoke

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: No sensitizing effects known.
- · Subacute to chronic toxicity: Toxic and/or corrosive effects may be delayed up to 24 hours.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic Corrosive

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Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: The material is harmful to the environment.
- · 12.2 Persistence and degradability

Inorganic product, is not eliminable from water by means of biological cleaning processes.

- 12.3 Bioaccumulative potential May be accumulated in organism
- 12.4 Mobility in soil No further relevant information available.
- **Ecotoxical effects:**
- · Remark: After neutralization a reduction of the harming action may be recognized
- · Additional ecological information:
- · General notes:

This statement was deduced from the properties of the single components.

Avoid transfer into the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Dilute concentrate with water and neutralize afterwards with suitable material (lime or chalk). The formed salts are inert and pose little hazard.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

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· Recommended cleansing agents: Water only.

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Transport information	
•	
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	UN1727
14.2 UN proper shipping name	
· DOT	Ammonium Biflouride, Mixture
· ADR	1727 AMMONIUM HYDROGENDIFLUORIDE, SOLI
	MIXTURE AMMONIUM HYDROGENDIFLUORIDE, SOLID
· IMDG, IATA	AMINIONION HYDROGENDIFLOORIDE, SOLID
· 14.3 Transport hazard class(es)	
· DOT	
CORROSIVE	
· Class	8 Corrosive substances.
· Label	8
· ADR	
and the second second	
· Class	8 (C2) Corrosive substances.
· Label	8
· IMDG, IATA	
of the second	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· DOT, ADR, ĬMĎG, İATA	II
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Acids, ammonium compounds

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 14.7 Transport in bulk according to Anne MARPOL73/78 and the IBC Code 	ex II of Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1 kg
· Transport category	2
· Tunnel restriction code	E
· UN "Model Regulation":	UN1727, AMMONIUM HYDROGENDIFLUORIDE, SOLID, 8, II

15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- · SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

81-88-9 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

81-88-9 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic Categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

1341-49-7 ammonium bifluoride

81-88-9 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride

TLV (Threshold Limit Value established by ACGIH)

1341-49-7 ammonium bifluoride

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A4

3

3

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

151-21-3 sodium dodecyl sulphate

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

R21/22 Harmful in contact with skin and if swallowed.

- R25 Toxic if swallowed.
- R34 Causes burns.

R36/38 Irritating to eyes and skin.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

· Sources

SDS Prepared by:

ChemTel Inc.

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