

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: ECOCOOL R-AFC 1515 L

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

Identified uses: Coolant/ Cutting solution

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

FUCHS LUBRICANTS (UK) PLC.
New Century Street
Hanley
Stoke-on-Trent, Staffordshire, ST1 5HU
UK

Telephone: +44 (0) 1782 203700

Contact Person:

Product Safety department
Telephone: +44 (0) 1782 203700
E-mail: product.safety@fuchs-oil.com

1.4 Emergency telephone number: UK NHS: Dial 111. Ireland NPIS: Dial +353 1 8092566.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye damage	Category 1	H318: Causes serious eye damage.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 3	H412: Harmful to aquatic life with long lasting effects.
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Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Product name: ECOCOOL R-AFC 1515 L

Contains: Fatty alcohol, ethoxylated
Monoethanol amine



Signal Words: Danger

Hazard Statement(s): H315: Causes skin irritation.
H318: Causes serious eye damage.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Supplemental label information

EUH208: Contains: Iodobutylcarbamate. May produce an allergic reaction.

2.3 Other hazards: By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of mineral base oil, anionic and nonionic agents and corrosion preventing additives in combination with stabilizers based on glycol-fatty alcohols. This product is applied only as solution or emulsion in water.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	1,00 - <5,00%		
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	1,00 - <5,00%		

Product name: ECOCOOL R-AFC 1515 L

Fatty alcohol, ethoxylated	EC: 500-201-8	1,00 - <3,00%		
acid, ionic equilibrium with organic bases	Neutralisation product (*)	1,00 - <5,00%		
Monoethanol amine	EINECS: 205-483-3	1,00 - <3,00%	01-2119486455-28	
Boric acid	EINECS: 233-139-2	0,30 - <1,00%	01-2119486683-25	**
Pyrrithione, sodium salt	EINECS: 223-296-5	0,10 - <0,25%		
Iodobutylcarbamate	EINECS: 259-627-5	0,10 - <0,25%		

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

(*) Neutralisation product: Equilibrium of Ionic Pairs in aqueous solution according to REACH Annex V, 4.

Classification

Chemical name	Identifier	Classification
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	CLP: Acute Tox. 4;H302, Acute Tox. 4;H312, Eye Irrit. 2;H319, Skin Irrit. 2;H315
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	CLP: Acute Tox. 4;H302, Acute Tox. 3;H311, Acute Tox. 3;H331, Flam. Liq. 3;H226, Eye Irrit. 2;H319, Skin Irrit. 2;H315
Fatty alcohol, ethoxylated	EC: 500-201-8	CLP: Acute Tox. 4;H302, Aquatic Chronic 3;H412, Eye Dam. 1;H318
acid, ionic equilibrium with organic bases	Neutralisation product (*)	CLP: Acute Tox. 4;H302, Eye Irrit. 2;H319, Skin Irrit. 2;H315
Monoethanol amine	EINECS: 205-483-3	CLP: Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335, Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332, Aquatic Chronic 3;H412
Boric acid	EINECS: 233-139-2	CLP: Repr. 1B;H360FD
Pyrrithione, sodium salt	EINECS: 223-296-5	CLP: Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 100; M-Factor (aquatic chronic): 1
Iodobutylcarbamate	EINECS: 259-627-5	CLP: Acute Tox. 4;H302, Acute Tox. 4;H332, Eye Dam. 1;H318, Skin Sens. 1;H317, STOT SE 3;H335, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1

CLP: Regulation No. 1272/2008.

For the wording of the listed hazard statements refer to section 16.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Note L of Annex VI of Regulation EC 1272/2008."

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Product name: ECOCOOL R-AFC 1515 L

Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Skin Contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
Ingestion:	Rinse mouth. Call a POISON CENTRE/doctor if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed:	Risk of serious damage to eyes. Causes skin irritation.
4.3 Indication of any immediate medical attention and special treatment needed	Hand over this safety data sheet to the physician with the special comment "watermiscible cutting oil". Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	CO ₂ , fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added
Unsuitable extinguishing media:	Water with a full water jet.

5.2 Special hazards arising from the substance or mixture:

During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire fighting procedures:	Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

Product name: ECOCOOL R-AFC 1515 L

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with skin. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Prevent formation of aerosols. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities: Local regulations concerning handling and storage of waterpolluting products have to be followed. Store above freezing.

7.3 Specific end use(s): Not applicable

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Monoethanol amine	TWA	1 ppm 2,5 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Monoethanol amine	STEL	3 ppm 7,6 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information: Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Product name: ECOCOOL R-AFC 1515 L

Eye/face protection:	Safety glasses (EN 166) recommended during refilling. Avoid contact with eyes. Wear closed protection glasses.
Skin protection	
Hand Protection:	Material: Nitrile-butadiene rubber (NBR). Min. Breakthrough time: >= 480 min Recommended thickness of the material: >= 0,38 mm Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other:	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
Respiratory Protection:	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
Thermal hazards:	Not known.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Amber
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	9,4 (50 g/l)
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	Value not relevant for classification
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)–:	Not applicable for mixtures
Flammability Limit - Lower (%)–:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	1,01 g/cm ³ (15 °C)
Solubility(ies)	

Product name: ECOCOOL R-AFC 1515 L

Solubility in Water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
Flow time	Value not relevant for classification
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
9.2 Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Stable under normal use conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes serious eye damage.

11.1 Information on toxicological effects

Acute toxicity

Oral Product:	ATEmix: 7.008 mg/kg
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Product name: ECOCOOL R-AFC 1515 L

Specified substance(s)

tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rat): 600 mg/kg
tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rat): 1.320 mg/kg
acid, ionic equilibrium with organic bases	LD 50 (Rat): 1.100 mg/kg
Monoethanol amine	LD 50 (Rat): 1.515 mg/kg (OECD 401)
Boric acid	LD 50 (Rat, Male): 3.450 mg/kg (OECD 401)
Pyrrithione, sodium salt	LD 50 (Rat): 1.208 mg/kg
Iodobutylcarbamate	LD 50 (Rat): 1.470 mg/kg

Dermal

Product:

ATEmix: 7.301 mg/kg

Specified substance(s)

tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rabbit): 1.680 mg/kg
tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rabbit): 1.100 mg/kg
Monoethanol amine	LD 50 (Rabbit): 2.504 mg/kg (OECD 402)
Pyrrithione, sodium salt	LD 50 (Rabbit, Female, Male): 1.800 mg/kg

Inhalation

Product:

ATEmix: 84,8 mg/l
Vapour

Specified substance(s)

Monoethanol amine	LC 50 (Rat, 4 h): > 1,487 mg/l
Boric acid	LC 50 (Rat, Female, Male, 4 h): > 2,12 mg/l (OECD 403)
Pyrrithione, sodium salt	LC 50 (Rat, 4 h): 1,08 mg/l Dusts, mists and fumes
Iodobutylcarbamate	LC 50 (Rat, 4 h): 6,89 mg/l

Product name: ECOCOOL R-AFC 1515 L

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are met.
Specified substance(s)
 Monoethanol amine Corrosive.
 Pyrithione, sodium salt OECD 404 (Rabbit, 4 h): Irritating.
 Iodobutylcarbamate (Rabbit): Strongly irritating.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are met.
Specified substance(s)
 Monoethanol amine Corrosive to skin and eyes.
 Iodobutylcarbamate (Rabbit): Strongly irritating.

Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
 Respiratory sensitizer: Based on available data, the classification criteria are not met.

Specified substance(s)

Monoethanol amine , OECD 406-1 (Guinea Pig)
 Not a skin sensitizer.
 Boric acid No sensitizing effect (guinea pig); OECD 406
 Pyrithione, sodium salt No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

Product name: ECOCOOL R-AFC 1515 L

Other adverse effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish

Specified substance(s)

tert. alkanolamine, ionic equilibrium with acids LC 50 (Fish, 96 h): 29 mg/l

tert. alkanolamine, ionic equilibrium with acids LC 50 (Fish, 96 h): 147 mg/l

acid, ionic equilibrium with organic bases LC 50 (Fish, 96 h): 122 mg/l

Monoethanol amine LC 50 (Fish, 96 h): 125 mg/l

Boric acid LC 50 (Fish, 96 h): 456 mg/l

Pyrithione, sodium salt LC 50 (Fish, 96 h): 0,0066 mg/l

Iodobutylcarbamate LC 50 (Fish, 96 h): 0,067 mg/l

Aquatic Invertebrates

Specified substance(s)

tert. alkanolamine, ionic equilibrium with acids EC 50 (Water Flea, 48 h): 73,7 mg/l

tert. alkanolamine, ionic equilibrium with acids EC 50 (Water Flea, 48 h): 165 mg/l

acid, ionic equilibrium with organic bases EC 50 (Water Flea, 48 h): 68 mg/l

Monoethanol amine EC 50 (Water Flea, 48 h): 65 mg/l

Boric acid EC 50 (Water Flea, 48 h): 133 mg/l

Pyrithione, sodium salt EC 50 (Water Flea, 48 h): 0,022 mg/l

Iodobutylcarbamate EC 50 (Water Flea, 48 h): 0,16 mg/l

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish

Specified substance(s)

Monoethanol amine NOEC (Fish, 30 d): 1,2 mg/l

Iodobutylcarbamate NOEC (Fish, 96 h): 0,049 mg/l

Product name: ECOCOOL R-AFC 1515 L

Aquatic Invertebrates

Specified substance(s)

Monoethanol amine NOEC (Water Flea, 21 d): 0,85 mg/l (OECD 211)
Iodobutylcarbamate EC 50 (Water Flea, 21 d): 0,05 mg/l

Toxicity to Aquatic Plants

Specified substance(s)

tert. alkanolamine, ionic equilibrium with acids EC 50 (Alga, 72 h): 3,2 mg/l
tert. alkanolamine, ionic equilibrium with acids EC 50 (Alga, 72 h): 44 mg/l
acid, ionic equilibrium with organic bases EC 50 (Alga, 72 h): 81 mg/l
Monoethanol amine EC 50 (Alga, 72 h): 22 mg/l
Boric acid EC 50 (Alga, 72 h): 229 mg/l
Iodobutylcarbamate EC 50 (Alga, 72 h): 0,022 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures
Specified substance(s)
Pyrithione, sodium salt (OECD 301B) Readily biodegradable
Iodobutylcarbamate Readily biodegradable

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other adverse effects:

Harmful to aquatic life with long lasting effects.

Water Hazard Class (WGK):

WGK 2: significantly water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Product name: ECOCOOL R-AFC 1515 L

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws. When storing used products, ensure that the waste categories and mixing instructions are observed. Do not empty into drains; dispose of this material and its container in a safe way. Product contains in the application concentration traces of iodine containing substances; this can result in an AOX value.

European Waste Codes

12 01 09*: machining emulsions and solutions free of halogens

SECTION 14: Transport information

ADR/RID

14.1 UN Number: —
 14.2 UN Proper Shipping Name: —
 14.3 Transport Hazard Class(es)
 Class: Non-dangerous goods
 Label(s): —
 Hazard No. (ADR): —
 Tunnel restriction code: —
 14.4 Packing Group: —
 14.5 Environmental hazards: —
 14.6 Special precautions for user: —

ADN

14.1 UN Number: —
 14.2 UN Proper Shipping Name: —
 14.3 Transport Hazard Class(es)
 Class: Non-dangerous goods
 Label(s): —
 14.3 Packing Group: —
 14.5 Environmental hazards: —
 14.6 Special precautions for user: —

IMDG

14.1 UN Number: —
 14.2 UN Proper Shipping Name: —
 14.3 Transport Hazard Class(es)
 Class: Non-dangerous goods
 Label(s): —
 EmS No.: —
 14.3 Packing Group: —
 14.5 Environmental hazards: —
 14.6 Special precautions for user: —

Product name: ECOCOOL R-AFC 1515 L

IATA

- 14.1 UN Number: –
- 14.2 Proper Shipping Name: –
- 14.3 Transport Hazard Class(es):
Class: Non-dangerous goods
Label(s): –
- 14.4 Packing Group: –
- 14.5 Environmental hazards: –
- 14.6 Special precautions for user: –

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

DIRECTIVE 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances

The product does not fall into the scope of the SEVESO III Directive.

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H360FD May damage fertility. May damage the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Other information: The classification complies with the current EU lists; however, it has been

Product name: ECOCOOL R-AFC 1515 L

supplemented with expert literature information and information provided by/about our company. It was derived from the test data and/or the application of the conventional method.

Revision Date:

15.08.2018

Disclaimer:

The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.