SAFETY DATA SHEET

Flux-Off Rosin

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Product name : Flux-Off Rosin
Chemical name : Flux-Off Rosin
Synonyms : ES835BE, ES1035E
Use of the substance/preparation : CLEANING PRODUCTS

Company/undertaking identification

Manufacturer : ITW Chemtronics

8125 Cobb Center Drive Kennesaw, GA 30152

Supplier :

]]]

Importer : ITW Contamination Control

Skejby Nordlandsvej 307 DK-8200 Aarhus N

Denmark

Tel +45 87 400 220 Fax +45 87 400 222 Email: info@itw-cc.com

Emergency telephone number : Chemtrec - 1-800-424-9300 or collect 703-527-3887

2. Composition/information on ingredients

Substance/Preparation : Preparation

Ingredient Name	CAS number	%	EC Number	Classification
Hydrocarbons, C>=5, C5-6 rich	68476-50-6	60-90	270-690-8	R45 Xn; R65
Ethanol	64-17-5	10-20	200-578-6	l '
Propane	74-98-6		200-827-9	
Butane	106-97-8	10-20	203-448-7	F+; R12; R45
propan-2-ol	67-63-0	2-6	200-661-7	F; R11
				Xi; R36
				R67
See Section 16 for the full text of the R Phrases declared above				

^{*} Occupational Exposure Limit(s), if available, are listed in Section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Physical/chemical Hazards : Extremely flammable.

Human health hazards : Irritating to eyes and skin.

See Section 11 for more detailed information on health effects and symptoms.

4. First aid measures

First aid measures

Inhalation

: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Obtain medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a

physician immediately.

Date of issue : 1/26/2006. Page: 1/5

Flux-Off Rosin

Skin Contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing

and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain

medical attention.

Eye contact In case of contact, immediately flush eyes with a copious amount of water for at least 15

minutes. Get medical attention if irritation occurs.

Specific treatments

See Section 11 for more detailed information on health effects and symptoms.

Fire-fighting measures

Extinguishing media : In case of fire, use water spray (fog), foam, dry chemical, or CQ.

Special exposure hazards No specific hazard.

Not available.

Hazardous thermal decomposition products These products are carbon oxides (CO, CQ).

Special protective equipment for

fire-fighters

: Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

Accidental release measures

Personal Precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable

protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

Environmental precautions and cleanup methods

Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

Handling and storage

: Do not breathe gas/fumes/vapour/sprayAvoid contact with eyes, skin and clothing.Wash Handling

thoroughly after handling.

Keep container in a cool, well-ventilated area.Do not puncture, incinerate or store the Storage

container at temperatures above 49(C (120(F) or in direct sunlight.

Packaging materials

Recommended : Use original container.

Specific uses

Exposure controls/personal protection

Ingredient Name	Occupational Exposure Limits		
Ethanol	ACGIH TLV (United States, 2002). Notes: 1996 Adoption Refers to		
	Appendix A Carcinogens.		
	TWA: 1880 mg/m ³ 8 hour(s).		
	TWA: 1000 ppm 8 hour(s).		
Propane	Simple asphyxiant.		
butane	ACGIH TLV (United States, 2000).		
	TWA: 1900 mg/m ³ 8 hour(s).		
	TWA: 800 ppm 8 hour(s).		
propan-2-ol	ACGIH TLV (United States, 2000).		
	STEL: 400 ppm 15 minute(s).		
	TWA: 200 ppm 8 hour(s).		

Exposure controls

Occupational exposure

controls

: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

: A respirator is not needed under normal and intended conditions of product use.

Hand protection

: Use chemical resistant, impervious gloves.

Eye protection

: Safety glasses.

: 1/26/2006. Page: 2/5 Date of issue

Flux-Off Rosin

9. Physical and chemical properties

General information

Appearance

Physical state : Liquid.
Colour : Clear.

Odour : Characteristic.

Odour threshold : The lowest known value is 180 ppm (Ethanol)

Important health, safety and environmental information

pH : Not available.

Boiling point : Weighted average: 79.27°C (174.7°F)

Melting point : Weighted average: -108.7°C (-163.7°F)

Flash point : -29 C

Explosive properties : Not considered as a product presenting risks of explosion.

Oxidising properties : Not available.

Vapour pressure : The highest known value is 5.3 kPa (40 mm Hg) (at 20°C) (Ethanol).

Relative density : Weighted average: 0.79 g/cm³

Solubility : Insoluble

Vapour density : 3 Air = 1

Evaporation rate (butyl acetate = : Greater than 1.

1)

Other information

Auto-ignition temperature : The lowest known value is 398.9°C (750°F) (Ethanol).

10. Stability and reactivity

Stability : The product is stable.

Conditions to Avoid : Do not puncture, incinerate or store the container at temperatures above 49(C (120(F) or in

direct sunlight.

Hazardous Decomposition

Products

: These products are carbon oxides (CO, CQ).

11. Toxicological information

Potential Acute Health Effects

Inhalation : Inhalation of vapours may cause dizziness, an irregular heartbeat, narcosis, nausea or

asphyxiation.

Ingestion: Aspiration hazard if swallowed- can enter lungs and cause damage.

Skin Contact : Irritating to skin.

Eye contact : Irritating to eyes.

Acute toxicity

Ingredient Name	<u>Test</u>	Result	Route	Species
Ethanol	LD50	7060 mg/kg	Oral	Rat
	LD50	6300 mg/kg	Oral	Rabbit
	LD50	3450 mg/kg	Oral	Mouse
	LDLo	1400 mg/kg	Oral	human
	LDLo	5500 mg/kg	Oral	Dog
	LC50	20000 (10	Inhalation	Rat
		hour(s))		
propan-2-ol	LD50	5045 mg/kg	Oral	Rat
	LD50	6410 mg/kg	Oral	Rabbit
	LD50	3600 mg/kg	Oral	Mouse
	LD50	12800 mg/kg	Dermal	Rabbit
	LDLo	1537 mg/kg	Oral	Dog
	LDLo	3570 mg/kg	Oral	human
	LDLo	5272 mg/kg	Oral	man

Carcinogenicity: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Over-exposure signs/symptoms

Target Organs

Date of issue : 1/26/2006. Page: 3/5

Flux-Off Rosin

: Contains material which causes damage to the following organs: blood, the nervous system, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

12. Ecological information

Ecotoxicity Data

Ingredient Name	Species Species	<u>Period</u>	Result
Ethanol	Daphnia magna (EC50)	48 hour(s)	2 mg/l
	Daphnia magna (EC50)	48 hour(s)	9.3 mg/l
	Daphnia magna (EC50)	48 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	13000 mg/l
propan-2-ol	Pimephales promelas (EC50)	48 hour(s)	10000 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	6550 mg/l
	Pimephales promelas (LC50)	96 hour(s)	9640 mg/l
	Pimephales promelas (LC50)	96 hour(s)	10400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	11130 mg/l

Other adverse effects : Not available.

13. Disposal considerations

Methods of disposal : Avoid contact of spilled material and runoff with soil and surface waterways. Dispose of

according to all federal, state and local applicable regulations.

Waste Classification : Not applicable. European Waste Catalogue : Not available.

(EWC)

Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	1950	Aerosol. Flammable	ADR Class: Flammab liquid with a flash point lower than 21°C (70°F).	-	***	-
ADN Class	1950	Aerosol. Flammable	ADN Class: Flammab liquid with a flash point lower than 21°C (70°F).	-	***	-
IMDG Class	1950	Aerosol. Class 2 Limited Quantity	2.1	-	À	-

Date of issue : 1/26/2006. Page: 4/5

Flux-Off Rosin IATA-DGR Class 1950 Aerosol, Flammable 2.1

15. Regulatory information

EU Regulations

Hazard symbol(s)



Extremely flammable

Risk phrases : R12- Extremely flammable. R36/38- Irritating to eyes and skin.

Safety Phrases : S16- Keep away from sources of ignition - No smoking.

S23- Do not breathe gas/fumes/vapour/spray

S51- Use only in well-ventilated areas.S2- Keep out of the reach of children.

Contains : Hydrocarbons, C>=5, C5-6 rich 270-690-8

Butane 203-448-7

Product Use : Classification and labelling have been performed according to EU directives 67/548/EEC,

1999/45/EC, including amendments and the intended use.

- Industrial applications,

Restrictions on the

Marketing and Use Directive

EC Statistical Classification : 32089091

(Tariff Code)

16. Other information

Full text of R phrases referred to : R12- Extremely flammable. R11- Highly flammable. in Sections 2 and 3 - Europe

R65- Harmful: may cause lung damage if swallowed.

R36- Irritating to eyes.

R67- Vapours may cause drowsiness and dizziness.

Full text of classifications referred to in Sections 2 and 3 - : F+ - Extremely flammable F - Highly flammable

Europe

Xn - Harmful Xi - Irritant

HISTORY

Date of printing : 1/27/2006. 1/26/2006. Date of issue

Date of previous issue : No Previous Validation.

Version

Prepared by

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Version 1.04	Page: 5/5