

SAFETY DATA SHEET

ES835BE Flux-Off(R) Rosin

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

Identification of the substance or mixture

Product name : ES835BE Flux-Off(R) Rosin
Product type : Aerosol.
Use of the substance/mixture : Remover for Rosin Soldering Flux

Company/undertaking identification

Manufacturer : ITW Chemtronics
8125 Cobb Center Drive
Kennesaw, GA 30152

Tel. 770-424-4888 or toll free 800-645-5244

Distributor :

Importer : ITW Contamination Control BV
Saffierlaan 5
VZ-2132 Hoofddorp
The Netherlands

Tel: +31 88 1307 400
FAX: +31 88 1307 499

e-mail address of person responsible for this SDS : askchemtronics@chemtronics.com

Emergency telephone number (with hours of operation) : Chemtrec - 1-800-424-9300 or collect 703-527-3887

2. HAZARDS IDENTIFICATION

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

Classification : F; R11
Xi; R38
R67
N; R51/53

Physical/chemical hazards : Highly flammable.

Human health hazards : Irritating to skin. Vapours may cause drowsiness and dizziness.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	107-83-5	20 - 50	203-523-4	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	96-14-0	10 - 30	202-481-4	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
ethanol	64-17-5	10 - 30	200-578-6	F; R11 [2]
isobutane	75-28-5	5 - 20	200-857-2	F+; R12 [2]
propane	74-98-6	5 - 20	200-827-9	F+; R12 [2]
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	75-83-2	1 - 10	200-906-8	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	79-29-8	1 - 10	201-193-6	F; R11 [1] [2] Xn; R65 Xi; R38 R67 N; R51/53
propan-2-ol	67-63-0	1 - 10	200-661-7	F; R11 [1] [2] Xi; R36 R67
n-hexane	110-54-3	0 - 1.5	203-777-6	F; R11 [1] [2] Repr. Cat. 3;

Date of issue/Date of revision : 11/29/2011.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

See Section 16 for the full text of the R-phrases declared above.				R62 Xn; R48/20, R65 Xi; R38 R67 N; R51/53
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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.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

First-aid measures

- Inhalation** : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. 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 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.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- 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.
- 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.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Flammable aerosol. 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. Runoff to sewer may create fire or explosion hazard.
- 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. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- 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.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : 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 pressurised 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the 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). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see Section 8). 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. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. 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 non-sparking tools. Empty containers retain product residue and can be hazardous.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.
- Packaging materials**
- Recommended** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	ACGIH TLV (United States, 1/2008). TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m ³ 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m ³ 15 minute(s).
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	ACGIH TLV (United States, 1/2008). TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m ³ 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m ³ 15 minute(s).
ethanol	ACGIH TLV (United States, 1/2007). TWA: 1880 mg/m ³ 8 hour(s). TWA: 1000 ppm 8 hour(s).
isobutane	ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hour(s).
propane	ACGIH TLV (United States, 1/2007). TWA: 1000 ppm 8 hour(s).
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	ACGIH TLV (United States, 1/2008). TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m ³ 8 hour(s). STEL: 1000 ppm 15 minute(s). STEL: 3500 mg/m ³ 15 minute(s).
hexane Mixture of isomers. Containing < 5% n-hexane (203-777-6)	ACGIH TLV (United States, 1/2008). TWA: 500 ppm 8 hour(s). TWA: 1760 mg/m ³ 8 hour(s). STEL: 1000 ppm 15 minute(s).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

propan-2-ol	STEL: 3500 mg/m ³ 15 minute(s). ACGIH TLV (United States, 1/2007). STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
n-hexane	EU OEL (Europe, 5/2006). Notes: Indicative 8 hours: 72 mg/m ³ 8 hour(s). 8 hours: 20 ppm 8 hour(s).

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour 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, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection** : 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.
- 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.

9. PHYSICAL AND CHEMICAL PROPERTIES**General information****Appearance**

- Physical state** : Liquid. [Aerosol.]
- Odour** : Hydrocarbon. Characteristic. [Slight]

Important health, safety and environmental information

- Boiling point** : Lowest known value: 50°C (122°F) (2,2-dimethylbutane). Weighted average: 66.22°C (151.2°F)
- Melting point** : May start to solidify at the following temperature: -88.83°C (-127.9°F) This is based on data for the following ingredient: propan-2-ol. Weighted average: -130.72°C (-203.3°F)
- Flash point** : Closed cup: -29°C (-20.2°F).
- Vapour pressure** : Highest known value: 5.3 kPa (40 mm Hg) (at 20°C) (Ethanol).
- Relative density** : Weighted average: 0.66 (Water = 1)
- Vapour density** : Highest known value: 3 (Air = 1) (3-methylpentane). Weighted average: 2.6 (Air = 1)
- Evaporation rate (butyl acetate = 1)** : >1 compared with butyl acetate

Other information

- Auto-ignition temperature** : Lowest known value: 277.85°C (532.1°F) (3-methylpentane).

10. STABILITY AND REACTIVITY

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Avoid release to the environment. Refer to special instructions/safety data sheet.
- Materials to avoid** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

- Inhalation** : Vapours may cause drowsiness and dizziness.
Ingestion : Irritating to mouth, throat and stomach.
Skin contact : Irritating to skin.
Eye contact : No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethanol	LD50 Intra-arterial	Rat	11 mg/kg	-
	LD50 Intraperitoneal	Rat	3600 ug/kg	-
	LD50 Intravenous	Rat	1440 mg/kg	-
	LD50 Oral	Rat	7060 mg/kg	-
	LD50 Oral	Rat - Male	7 g/kg	-
	LDLo Dermal	Rabbit	20 g/kg	-
	TDLo Intraperitoneal	Rat - Male	2700 mg/kg	-
	TDLo Intraperitoneal	Rat	2000 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	1.25 mg/kg	-
	TDLo Intraperitoneal	Rat	1000 mg/kg	-
	TDLo Intraperitoneal	Rat	363.6 ug/kg	-
	TDLo Intracerebral	Rat	500 mg/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Intravenous	Rat	1 g/kg	-
	TDLo Intraperitoneal	Rat - Male	0.5 g/kg	-
	TDLo Intraperitoneal	Rat	0.25 g/kg	-
	TDLo Oral	Rat	10 mL/kg	-
	TDLo Oral	Rat	6.67 mL/kg	-
	TDLo Oral	Rat	5 mL/kg	-
	TDLo Oral	Rat	0.72 g/kg	-
	TDLo Oral	Rat	8000 mg/kg	-
	TDLo Oral	Rat	2.45 g/kg	-
	TDLo Oral	Rat	6000 mg/kg	-
	TDLo Oral	Rat	5250 mg/kg	-
	TDLo Oral	Rat	3 g/kg	-
	TDLo Oral	Rat	5000 mg/kg	-
	TDLo Oral	Rat	4800 mg/kg	-
	TDLo Oral	Rat	5.25 g/kg	-
	TDLo Oral	Rat	0.5 g/kg	-
	TDLo Oral	Rat	6 g/kg	-
	TDLo Oral	Rat	2 g/kg	-
	TDLo Oral	Rat	2.5 g/kg	-
	TDLo Oral	Rat	5 g/kg	-
	TDLo Oral	Rat	1600 mg/kg	-
	TDLo Oral	Rat	1500 mg/kg	-
	TDLo	Rat	1.5 g/kg	-
	TDLo Oral	Rat	6.4 g/kg	-
	TDLo	Rat	3500 mg/kg	-
	TDLo	Rat	106 ug/kg	-
	TDLo	Rat - Male	2.4 mg/kg	-
	TDLo	Rat	3000 mg/kg	-
	TDLo Unreported	Rat	3 g/kg	-
	LC50 Inhalation Vapour	Rat	658000 mg/m3	4 hours
LC50 Inhalation Gas.	Rat	57 pph	15 minutes	
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Intraperitoneal	Rat	2735 mg/kg	-
	LD50 Intravenous	Rat	1088 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-

11. TOXICOLOGICAL INFORMATION

	LD50 Oral	Rat	5045 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	TDL0	Rat	800 mg/kg	-
	Intraperitoneal			
n-hexane	LD50 Oral	Rat	25 g/kg	-
	LDLo	Rat	9100 mg/kg	-
	Intraperitoneal			
	TDL0 Oral	Rat	20000 mg/kg	-

Potential chronic health effects

Chronic effects	: 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.

Over-exposure signs/symptoms

Inhalation	: Adverse symptoms may include the following: nausea or vomiting respiratory tract irritation coughing headache drowsiness/fatigue dizziness/vertigo
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: irritation redness
Target organs	: 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

Environmental effects : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Ethanol	-	Acute EC50 9.3 to 11.2 g/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute EC50 10600 to 11200 mg/L Fresh water	Daphnia - Water flea - Daphnia obtusa	48 hours
	-	Acute EC50 >100 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute EC50 2000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 13 to 16 ml/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
	-	Acute LC50 5577000 to 6557000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia	48 hours
	-	Acute LC50 3715000 to 4432000 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia	48 hours
	-	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Acute LC50 42000 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	4 days
	-	Acute LC50 25500 ug/L	Crustaceans - Brine shrimp -	48 hours

12. ECOLOGICAL INFORMATION

		Marine water	Artemia franchiscana	
	-	Acute LC50 11000000 ug/L	Fish - Bleak - Alburnus alburnus	96 hours
	-	Marine water Acute LC50 10000000 to 11500000 ug/L	Fish - Bleak - Alburnus alburnus	96 hours
	-	Marine water Acute LC50 5680 to 7392 mg/L	Daphnia - Water flea - Daphnia magna	48 hours
	-	Fresh water Acute LC50 6076000 to 7115000 ug/L	Daphnia - Water flea - Ceriodaphnia dubia	48 hours
	-	Fresh water Acute LC50 6325000 to 7413000 ug/L	Daphnia - Water flea - Ceriodaphnia dubia	48 hours
	-	Fresh water Acute LC50 14200000 to 15100000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Fresh water Acute LC50 13480000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Chronic NOEC <6.3 g/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
propan-2-ol	-	Acute LC50 11130000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Acute LC50 10400000 to 10600000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Fresh water Acute LC50 9640000 to 10000000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Fresh water Acute LC50 6550000 to 7450000 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Fresh water Acute LC50 4200000 ug/L	Fish - Harlequinfish, red rasbora - Rasbora heteromorpha	96 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis	96 hours
	-	Acute LC50 1400000 to 1950000 ug/L	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
n-hexane	-	Marine water Acute LC50 113000 ug/L	Fish - Mozambique tilapia - Tilapia mossambica	96 hours
	-	Fresh water Acute LC50 2500 to 2980 ug/L	Fish - Fathead minnow - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

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





13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Do not puncture or incinerate container.

13. DISPOSAL CONSIDERATIONS

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	Classes	PG*	Label	Additional information
ADR/RID Class	1950	Aerosols, flammable	ADR Class: Flammable liquid with a flash point lower than 21°C (70°F).	-		-
ADN/ADNR Class	1950	Aerosols, flammable	ADN/ADNR Class: Flammable liquid with a flash point lower than 21°C (70°F).	-		-
IMDG Class	1950	AEROSOLS Limited quantity (2-methylpentane)	2.1	-		-
IATA Class	1950	Aerosols, flammable (2-methylpentane)	2.1	-		-

PG* : Packing group

15. REGULATORY INFORMATION**EU regulations**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols :



Highly flammable, Irritant, Dangerous for the environment

Risk phrases

- : R11- Highly flammable.
- R38- Irritating to skin.
- R67- Vapours may cause drowsiness and dizziness.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

- : S23- Do not breathe [***].
- S38- In case of insufficient ventilation, wear suitable respiratory equipment.
- S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Product use

- : Industrial applications, Used by spraying.

Europe inventory

- : **Europe inventory**: All components are listed or exempted.

Other EU regulations

- Additional warning phrases** : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

16. OTHER INFORMATION

Full text of R-phrases

referred to in sections 2 and 3 - Europe

- : R12- Extremely flammable.
- R11- Highly flammable.
- R62- Possible risk of impaired fertility.
- R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R65- Harmful: may cause lung damage if swallowed.
- R36- Irritating to eyes.
- R38- Irritating to skin.
- R67- Vapours may cause drowsiness and dizziness.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications

referred to in sections 2 and 3 - Europe

- : F+ - Extremely flammable
- F - Highly flammable
- Repr. Cat. 3 - Toxic to reproduction Category 3
- Xn - Harmful
- Xi - Irritant
- N - Dangerous for the environment

16. OTHER INFORMATION

History

Date of printing : 11/29/2011.
Date of issue/Date of revision : 11/29/2011.
Date of previous issue : No previous validation.
Version : 3
Prepared by : Not available.

Indicates information that has changed from previously issued version.

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.