



SAFETY DATA SHEET

Creation Date 11-Feb-2010

Revision Date 03-Feb-2014

Revision Number 5

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description:	Furfuryl alcohol
Cat No. :	119790000; 119790010; 119790025; 119790100; 119792500
Synonyms	2-Furanmethanol
CAS-No	98-00-0
EC-No.	202-626-1
Molecular Formula	C ₅ H ₆ O ₂
Reach Registration Number	01-2119493965-18

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

Recommended Use	Laboratory chemicals
Sector of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category	PC21 - Laboratory chemicals
Process categories	PROC15 - Use as a laboratory reagent
Environmental release category	ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Uses advised against	No Information available

1.3. Details of the supplier of the safety data sheet

Company	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
E-mail address	begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

SECTION 2: HAZARDS IDENTIFICATION**CLP Classification - Regulation (EC) No 1272/2008****Physical hazards**

Based on available data, the classification criteria are not met

Health hazards

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 2
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity - (single exposure)	Category 3
Specific target organ toxicity - (repeated exposure)	Category 2

Environmental hazards

Based on available data, the classification criteria are not met

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)	T - Toxic
R-phrases(s)	R23 - Toxic by inhalation R40 - Limited evidence of a carcinogenic effect R21/22 - Harmful in contact with skin and if swallowed R36/37 - Irritating to eyes and respiratory system R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

2.2. Label elements**Signal Word****Danger****Hazard Statements**

- H319 - Causes serious eye irritation
- H315 - Causes skin irritation
- H335 - May cause respiratory irritation
- H301 - Toxic if swallowed
- H311 - Toxic in contact with skin
- H330 - Fatal if inhaled
- H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
- H351 - Suspected of causing cancer if inhaled

Precautionary Statements

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P310 - Immediately call a POISON CENTER or doctor/ physician
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)
No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Furfuryl alcohol	98-00-0	EEC No. 202-626-1	>95	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)	Xn; R21/22-48/20 T; R23 Xi; R36/37 Carc.Cat.3; R40

Reach Registration Number

01-2119493965-18

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Protection of First-aiders	Use personal protective equipment.

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

Breathing difficulties. . Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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

Notes to Physician	Treat symptomatically.
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SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep under nitrogen.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

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Furfuryl alcohol

Exposure limits

List source(s):

IRE - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component

Furfuryl alcohol

European Union	The United Kingdom	France	Belgium	Spain
		TWA / VME: 10 ppm (8 heures). TWA / VME: 40 mg/m ³ (8 heures). Peau	TWA: 10 ppm 8 uren TWA: 41 mg/m ³ 8 uren STEL: 15 ppm 15 minuten STEL: 61 mg/m ³ 15 minuten Huid	STEL / VLA-EC: 15 ppm (15 minutos). STEL / VLA-EC: 61 mg/m ³ (15 minutos). TWA / VLA-ED: 5 ppm (8 horas) TWA / VLA-ED: 20 mg/m ³ (8 horas) Piel

Component

Furfuryl alcohol

Italy	Germany	Portugal	The Netherlands	Finland
	TWA: 10 ppm (8 Stunden). AGW - exposure factor 1 TWA: 41 mg/m ³ (8 Stunden). AGW - exposure factor 1 TWA: 10 ppm (8 Stunden). MAK TWA: 41 mg/m ³ (8 Stunden). MAK Haut	STEL: 15 ppm 15 minutos TWA: 10 ppm 8 horas Pele		TWA: 2 ppm 8 tunteina TWA: 8.1 mg/m ³ 8 tunteina STEL: 10 ppm 15 minuutteina STEL: 41 mg/m ³ 15 minuutteina Skin

Component

Furfuryl alcohol

Austria	Denmark	Switzerland	Poland	Norway
Skin TWA: 5 ppm 8 Stunden TWA: 20 mg/m ³ 8 Stunden	TWA: 5 ppm 8 timer TWA: 20 mg/m ³ 8 timer Skin	Skin STEL: 10 ppm 15 Minuten STEL: 40 mg/m ³ 15 Minuten MAK: 10 ppm 8 Stunden MAK: 40 mg/m ³ 8 Stunden	NDSC: 60 mg/m ³ 15 minutach TWA: 30 mg/m ³ 8 godzinach Skóra	TWA: 5 ppm 8 timer TWA: 20 mg/m ³ 8 timer STEL: 10 ppm 15 minutter. STEL: 30 mg/m ³ 15 minutter. Skin

Component

Furfuryl alcohol

Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
	Skin Notation TWA: 10 ppm 8 satima. TWA: 40 mg/m ³ 8 satima.	TWA: 5 ppm 8 hr. TWA: 20 mg/m ³ 8 hr. STEL: 15 ppm 15 min STEL: 60 mg/m ³ 15 min Skin		TWA: 20 mg/m ³ 8 hodinách. Potential for cutaneous absorption Ceiling: 40 mg/m ³

Component

Furfuryl alcohol

Estonia	Gibraltar	Greece	Hungary	Iceland
Skin notation TWA: 5 ppm 8 tundides. TWA: 20 mg/m ³ 8 tundides. STEL: 10 ppm 15 minutites. STEL: 40 mg/m ³ 15 minutites.		skin - potential for cutaneous absorption STEL: 15 ppm STEL: 60 mg/m ³ TWA: 10 ppm TWA: 40 mg/m ³	STEL: 40 mg/m ³ 15 percekben. TWA: 40 mg/m ³ 8 órában. potential for cutaneous absorption	TWA: 5 ppm 8 klukkustundum. TWA: 20 mg/m ³ 8 klukkustundum. Skin notation Ceiling: 10 ppm Ceiling: 40 mg/m ³

Component

Furfuryl alcohol

Latvia	Lithuania	Luxembourg	Malta	Romania
TWA: 0.5 mg/m ³	TWA: 5 ppm TWA: 20 mg/m ³ Skin notation STEL: 10 ppm STEL: 40 mg/m ³			TWA: 12.5 ppm 8 ore TWA: 50 mg/m ³ 8 ore STEL: 25 ppm 15 minute STEL: 100 mg/m ³ 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Furfuryl alcohol	Skin notation MAC: 0.5 mg/m ³	Ceiling: 41 mg/m ³ TWA: 10 ppm TWA: 41 mg/m ³	TWA: 10 ppm 8 urah TWA: 41 mg/m ³ 8 urah Potential for cutaneous absorption	STV: 10 ppm 15 minuter STV: 40 mg/m ³ 15 minuter LLV: 5 ppm 8 timmar. LLV: 20 mg/m ³ 8 timmar. Skin notation	

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours

Derived No Effect Level (DNEL) Workers

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation	8 mg/m ³	143 mg/m ³	8 mg/m ³	4 mg/kg 31 mg/m ³

Predicted No Effect Concentration (PNEC) No information available.

Fresh water	0.17 mg/L
Fresh water sediment	0.861 mg/kg
Marine water	0.017 mg/L
Marine water sediment	0.08641 mg/kg
Water Intermittent	1.7 mg/L
Food chain	35.3 mg/kg
Soil (Agriculture)	0.0724 mg/kg

8.2. Exposure controls**Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)
Nitrile rubber				
Neoprene				
PVC				

Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced..

Recommended Filter type: Organic gases and vapours filter, Type A, Brown, conforming to EN14387.

Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141
When RPE is used a face piece Fit Test should be conducted.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

Prevent product from entering drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Yellow	
Physical State	Liquid.	
Odor	No information available	
Odor Threshold	No data available	
pH	4-5	30% aq.sol.
Melting Point/Range	-29°C / -20.2°F	
Softening Point	No data available	
Boiling Point/Range	170°C / 338°F	@ 760 mmHg
Flash Point	65°C / 149°F	Method - No information available.
Evaporation Rate	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	Lower 1.8 vol% Upper 16.3 vol%	
Vapor Pressure	0.53 mbar @ 20°C	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	1.13	
Bulk Density	Not applicable	Liquid
Water Solubility	No information available.	
Solubility in other solvents	No information available.	
Partition Coefficient (n-octanol/water)	Component Furfuryl alcohol	log Pow 0.28

Autoignition Temperature	391 - °C / 735.8 - °F	
Decomposition temperature	No data available	
Viscosity	5 cP @ 25°C	
Explosive Properties	No information available.	explosive air/vapour mixtures possible
Oxidizing Properties	No information available.	

9.2. Other information

Molecular Formula	C5 H6 O2
Molecular Weight	98.10

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

None known, based on information available.

10.2. Chemical stability

Stable under normal conditions. Air sensitive.

10.3. Possibility of hazardous reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

10.4. Conditions to avoid

Incompatible products, Excess heat, Keep away from open flames, hot surfaces and sources of ignition, Exposure to air.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition productsCarbon monoxide (CO), Carbon dioxide (CO₂).**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Product Information****(a) acute toxicity;**

Oral	Category 3
Dermal	Category 3
Inhalation	Category 2

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Furfuryl alcohol	177 mg/kg (Rat)	3825 mg/kg (Rat) 400 mg/kg (Rabbit)	233 ppm (Rat) 4 h

(b) skin corrosion/irritation; Category 2**(c) serious eye damage/irritation;** Category 2**(d) respiratory or skin sensitization;**

Respiratory	Based on available data, the classification criteria are not met
Skin	Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity;

Category 2

Limited evidence of a carcinogenic effect

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Furfuryl alcohol			Cat. 3B	

(g) reproductive toxicity;

Based on available data, the classification criteria are not met

(h) STOT-single exposure;

Category 3

(i) STOT-repeated exposure;

Category 2

Target Organs

Eyes, Skin, Respiratory system, Central nervous system (CNS).

(j) aspiration hazard;

Based on available data, the classification criteria are not met

Other Adverse Effects

See actual entry in RTECS for complete information

**Symptoms / effects,
both acute and delayed**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity****Ecotoxicity effects**

Do not empty into drains. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Furfuryl alcohol	32 mg/L LC50 96 h	EC50 = 328 mg/L 24h		

12.2. Persistence and degradability**Degradation in sewage
treatment plant**

No information available

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.3. Bioaccumulative potential

No information available.

Component	log Pow	Bioconcentration factor (BCF)
Furfuryl alcohol	0.28	No data available

12.4. Mobility in soil

No information available.

**12.5. Results of PBT and vPvB
assessment**

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

Component	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Furfuryl alcohol	Group III Chemical		

Persistent Organic Pollutant

This product does not contain any known or suspected substance

Ozone Depletion Potential

This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

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Furfuryl alcohol

Waste from Residues / Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point..
European Waste Catalogue (EWC)	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Other Information	Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number	UN2874
14.2. UN proper shipping name	Furfuryl alcohol
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III

ADR

14.1. UN number	UN2874
14.2. UN proper shipping name	Furfuryl alcohol
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III

IATA

14.1. UN number	UN2874
14.2. UN proper shipping name	Furfuryl alcohol
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Furfuryl alcohol	202-626-1	-		X	X	-	X	X	X	X	X

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Furfuryl alcohol	WGK 1	

Component	France - INRS (Tables of occupational diseases)
Furfuryl alcohol	Tableaux des maladies professionnelles (TMP) - RG 74 RG 84

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment
Take note of Dir 94/33/EC on the protection of young people at work

ACR11979

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R40 - Limited evidence of a carcinogenic effect

R23 - Toxic by inhalation

R36/37 - Irritating to eyes and respiratory system

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

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

Full text of H-Statements referred to under sections 2 and 3

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H330 - Fatal if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H351 - Suspected of causing cancer

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Industrial Hygiene

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - Volatile Organic Compounds

Key literature references and sources for data

Suppliers safety data sheet,

Chemadvisor - LOLI,

Merck index,

RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Creation Date 11-Feb-2010

Revision Date 03-Feb-2014

Revision Summary

Reason for revision (M)SDS sections updated, 2, 8, 9.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet