



SAFETY DATA SHEET LOTOXANE FAST

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

1.1. Product identifier

Product name LOTOXANE FAST
Product number S034TAP
Internal identification C044

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

Identified uses Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Flam. Liq. 3 - H226
Health hazards Asp. Tox. 1 - H304
Environmental hazards Aquatic Chronic 4 - H413

Classification (67/548/EEC or 1999/45/EC) Xn;R65. R10,R53,R66.

2.2. Label elements

Pictogram



Signal word

Danger

LOTOXANE FAST

Hazard statements	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P331 Do NOT induce vomiting. P501 Dispose of contents/container in accordance with national regulations. P280 Wear protective gloves.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	ISOPARAFFINIC HYDROCARBON

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ISOPARAFFINIC HYDROCARBON	60-100%
CAS number: —	EC number: 923-037-2
	REACH registration number: 01-2119471991-29-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226	Xn;R65. R10,R53,R66.
Asp. Tox. 1 - H304	
Aquatic Chronic 4 - H413	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water. Use suitable lotion to moisturise skin.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May cause discomfort.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Flammable liquid and vapour.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Provide adequate ventilation. Do not touch or walk into spilled material. Wipe up with an absorbent cloth and dispose of waste safely. Leave small quantities to evaporate, if safe to do so. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin, eyes and clothing. Do not breathe vapours. Do not reuse empty containers. Do not eat, drink or smoke when using this product. Do not handle broken packages without protective equipment. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store at temperatures between 0°C and 30°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): 300.00

ISOPARAFFINIC HYDROCARBON

Long-term exposure limit (8-hour TWA): WEL 1200 mg/m³

WEL = Workplace Exposure Limit

ISOPARAFFINIC HYDROCARBON

DNEL	Industry - Inhalation; : N/A Industry - Dermal; : N/A Consumer - Inhalation; : N/A Consumer - Dermal; : N/A Consumer - Oral; : N/A
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PNEC	- Fresh water; N/A - Marine water; N/A - Soil; N/A - Sediment; N/A - STP; N/A - Intermittent release; N/A
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. Rubber (natural, latex). Neoprene. Butyl rubber. Chloroprene rubber. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.
Hygiene measures	Use appropriate hand lotion to prevent defatting and cracking of skin. Wash hands thoroughly after handling.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Colourless liquid.
Odour	Mild.
pH	Not applicable.
Initial boiling point and range	140 - 200°C @ 760 mm Hg
Flash point	>41°C PMCC (Pensky-Martens closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.6 Upper flammable/explosive limit: 7.0
Vapour pressure	1.3 kPa @ 20°C
Relative density	0.75 @ 15°C
Solubility(ies)	Insoluble in water.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 747 g/litre.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

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Materials to avoid Flammable/combustible materials.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances:
Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Kinematic viscosity ≤ 20.5 mm²/s.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact May cause discomfort.

Toxicological information on ingredients.

ISOPARAFFINIC HYDROCARBON

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (oral LD₅₀) Estimated value.

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Estimated value.

SECTION 12: Ecological Information

Ecotoxicity May cause long lasting harmful effects to aquatic life.

12.1. Toxicity

Acute toxicity - fish Not determined.

12.2. Persistence and degradability

Ecological information on ingredients.

ISOPARAFFINIC HYDROCARBON

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Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Ecological information on ingredients.

ISOPARAFFINIC HYDROCARBON

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Ecological information on ingredients.

ISOPARAFFINIC HYDROCARBON

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

ISOPARAFFINIC HYDROCARBON

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Ecological information on ingredients.

ISOPARAFFINIC HYDROCARBON

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (petroleum distillate)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (petroleum distillate)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (petroleum distillate)

14.3. Transport hazard class(es)

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ADR/RID class	3
IMDG class	3
ICAO class/division	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

General information	Only trained personnel should use this material.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	08/09/2015
Revision	2.3
Supersedes date	06/03/2014
Risk phrases in full	R10 Flammable. R53 May cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking.

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Hazard statements in full

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H413 May cause long lasting harmful effects to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Exposure scenario USE IN CLEANING AGENTS - INDUSTRIAL and PROFESSIONAL

Identification

Product name	LOTOXANE FAST
EC number	923-037-2
Revision date	04/09/2015
Version number	1.0
Es reference	Lotoxane Fast
Supplier	ARROW SOLUTIONS RAWDON ROAD MOIRA SWADLINCOTE DERBYSHIRE DE12 6DA TEL: +44 (0)1283 221044 FAX: +44 (0)1283 225731 sales@arrowchem.com

1. Title of exposure scenario

Main title	USE IN CLEANING AGENTS - INDUSTRIAL and PROFESSIONAL
Process scope	Covers the use as a component of cleaning products, including transfer from storage, pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.
Main sector	SU3 Industrial uses SU22 Professional uses
Sector of use	SU3 Industrial uses SU22 Professional uses
Environment	Cleaning Cleaning manufacturing equipment for maintenance purposes General exposures (open systems) Handling of product in small amounts or in situations where only low quantities of products are likely to be released Manual spraying Metal cleaners Metal packaging, coil coating, automotive OEM, flexible packaging, newspapers, wallcoverings Spraying Spraying/fogging by manual application Storage Transfer from/pouring from containers Transfer of process wastes to storage containers Vessel and container cleaning Wipes
Environmental release category	ERC4 Industrial use of processing aids in processes and products, not becoming part of articles. ERC8a Wide dispersive indoor use of processing aids in open systems. ERC8d Wide dispersive outdoor use of processing aids in open systems.

USE IN CLEANING AGENTS - INDUSTRIAL and PROFESSIONAL

SPERC ESVOC SpERC 4.4a.v1 ESVOC SpERC 8.4b.v1

Worker

Cleaning

Process category PROC10 Roller application or brushing of adhesive and other coating.
 PROC13 Treatment of articles by dipping and pouring.
 PROC2 Use in closed, continuous process with occasional controlled exposure
 PROC3 Use in closed batch process (synthesis or formulation).
 PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises.
 PROC7 Spraying in industrial settings and applications.
 PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.
 PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.
 PROC11 Spraying outside industrial settings and/or applications.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Control of environmental exposure

Environmental release category ERC4 Industrial use of processing aids in processes and products, not becoming part of articles.

SPERC ESVOC SpERC 4.4a.v1

Product characteristics

Physical state Liquid Volatile (non-aqueous)

Concentration details Covers concentrations up to 100 %.

Amounts used

Annual amount per site: 30.6 tonnes
 Fraction of EU tonnage used in region: 0.1
 Fraction of Regional tonnage used locally: 1
 Maximum daily site tonnage: 1200 kg

Frequency and duration of use

Continuous use/release.
 Emission days: 365 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air Release fraction to air from wide dispersive use (regional only): 0.3

Emission factor - soil Release fraction to soil from wide dispersive use (regional only): 0

Environmental factors not influenced by risk management measures

Dilution Local freshwater dilution factor: 10 (Estimated)
 Local marine water dilution factor: 100 (Estimated)

Other factors Negligible wastewater emissions as process operates without water contact. Product applied to a substrate to form a solid matrix.

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used.

Technical measures Adequate closed storage facilities (e.g. bulk storage tanks, intermediate bulk containers, drums) for VOC-containing raw materials. Use drum pumps or carefully pour from container.

USE IN CLEANING AGENTS - INDUSTRIAL and PROFESSIONAL

STP type Municipal STP.

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Air Volatile compounds subject to air emission controls. Efficiency of at least 70% Allow volatiles to evaporate. Dispose of solid residue according to applicable regulations.

Water Provide onsite wastewater removal efficiency of 0%. Risk from environmental exposure is driven by fresh water.

Soil Do not apply industrial sludge to natural soils. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Conditions and measures related to external treatment of waste for disposal

Sludge treatment Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Waste treatment Dispose of empty containers and wastes safely. Dispose of waste cans and containers according to local regulations.

Disposal method Dispose of this material and its container at hazardous or special waste collection point.

2. Conditions of use affecting exposure (Industrial - Environment 2)

Control of environmental exposure

Environmental release category ERC8a Wide dispersive indoor use of processing aids in open systems.
ERC8d Wide dispersive outdoor use of processing aids in open systems.

SPERC ESVOC SpERC 8.4b.v1

Product characteristics

Physical state Liquid Volatile (non-aqueous)

Concentration details Covers concentrations up to 100 %.

Amounts used

Annual amount for wide dispersive uses: 7 tonnes
Amount refers to Region.

Frequency and duration of use

Continuous release.
Emission days: 365 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air Release fraction to air from wide dispersive use (regional only): 0.02

Emission factor - water Release fraction to wastewater from wide dispersive use: 1e-006 (Estimated)

Emission factor - soil Release fraction to soil from wide dispersive use (regional only): 0

Environmental factors not influenced by risk management measures

Dilution Local freshwater dilution factor: 10 (Estimated)
Local marine water dilution factor: 100 (Estimated)

Risk management measures

Good practice Common practices vary across sites, thus conservative process release estimates used. Carefully handle the substance to minimise releases. Carefully pour from containers. Clear up spills immediately and dispose of waste safely.

USE IN CLEANING AGENTS - INDUSTRIAL and PROFESSIONAL

Technical measures Adequate closed storage facilities (e.g. bulk storage tanks, intermediate bulk containers, drums) for VOC-containing raw materials. Use drum pumps or carefully pour from container.

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Air Treat air emission to provide a typical removal efficiency of N/A%.

Water If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0%. No wastewater treatment required.

Conditions and measures related to external treatment of waste for disposal

Sludge treatment Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Waste treatment Dispose of empty containers and wastes safely. Dispose of waste cans and containers according to local regulations.

3. Exposure estimation (Environment 1)

Environmental release category ERC4 Industrial use of processing aids in processes and products, not becoming part of articles.

Sector of use SU3 Industrial uses

Assessment method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

3. Exposure estimation (Environment 2)

Environmental release category ERC8a Wide dispersive indoor use of processing aids in open systems.
ERC8d Wide dispersive outdoor use of processing aids in open systems.

Sector of use SU22 Professional uses

Assessment method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

3. Exposure estimation (Health 1)

A quantitative risk assessment is not required for human health.

3. Exposure estimation (Health 2)

A quantitative risk assessment is not required for human health.