



SAFETY DATA SHEET

SUPERSOLVE AS

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

1.1. Product identifier

Product name SUPERSOLVE AS
Internal Id A145

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
EMERGENCY: +44 (0) 777 8505 330
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

+44 (0) 777 8505 330

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R38. F+;R12. N;R51/53. R67.

2.2. Label elements

Labelling



Irritant



Extremely flammable



Dangerous for the environment

Risk Phrases

R12	Extremely flammable.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Safety Phrases

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S24	Avoid contact with skin.
S37	Wear suitable gloves.

SUPERSOLVE AS

S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
S51	Use only in well-ventilated areas.
A1	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1,1,1,2-TETRAFLUOROETHANE		60-100%
CAS-No.: 811-97-2	EC No.: 212-377-0	Registration Number: 01-2119459374-33-xxxx
Classification (EC 1272/2008) Compr. Gas - H280	Classification (67/548/EEC) Not classified.	
ISOPARAFFINIC HYDROCARBON		10-30%
CAS-No.: 90622-56-3	EC No.: 292-458-5	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT Single 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67.	
PETROLEUM DISTILLATES		5-10%
CAS-No.: 92062-15-2	EC No.: 295-529-9	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Skin Irrit. 2 - H315 STOT Single 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67,R66.	

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 the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

Rinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Wash skin thoroughly with soap and water. Use suitable lotion to moisturise skin.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. 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.

Drowsiness, dizziness, disorientation, vertigo.

SUPERSOLVE AS

Ingestion

Due to the physical nature of this material it is unlikely that swallowing will occur.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Irritation of eyes and mucous membranes.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Cool containers exposed to flames with water until well after the fire is out.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not smoke, use open fire or other sources of ignition.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb with inert, damp, non-combustible material, then flush area with water.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid inhalation of vapours/spray and contact with skin and eyes. Keep away from heat, sparks and open flame. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store at moderate temperatures in dry, well ventilated area.

Storage Class

Chemical storage.

7.3. 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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,1,1,2-TETRAFLUOROETHANE	WEL	1000 ppm	4240 mg/m3			
ISOPARAFFINIC HYDROCARBON	WEL		1200 mg/m3			

SUPERSOLVE AS

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Engineering measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand protection

Chemical resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Rubber, neoprene or PVC.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

Wash promptly if skin becomes contaminated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Water-white.
Odour	Mild. Solvent.
Solubility	Insoluble in water

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Flammable/combustible material.

10.6. Hazardous decomposition products

Fire or high temperatures create: Oxides of: Carbon. Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Medical Symptoms

EYES AND MUCOUS MEMBRANES. Irritation of eyes and mucous membranes. RESPIRATORY SYSTEM. Upper respiratory irritation. SKIN. Skin irritation. NOSE. Irritation of nose due to vapour or dust contact. NERVOUS SYSTEM. Headache. Dizziness.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Acute Toxicity - Fish

Not determined.

SUPERSOLVE AS

12.2. Persistence and degradability

Degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name	AEROSOLS
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14.3. Transport hazard class(es)

ADR/RID/ADN Class	Class 2.1: Flammable gases.
IMDG Class	2
ICAO Class/Division	2
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	5F
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14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

Tunnel Restriction Code	(D)
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SUPERSOLVE AS

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

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.

Statutory Instruments

Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

Revision Date 01/03/2012

Revision 2.0

Supersedes date 02/11/2010

Date 02/11/2010

Risk Phrases In Full

R65 Harmful: may cause lung damage if swallowed.

R11 Highly flammable

R38 Irritating to skin.

NC Not classified.

R66 Repeated exposure may cause skin dryness or cracking.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

EUH066 Repeated exposure may cause skin dryness or cracking.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

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.