

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotch-Weld Solvent No.1 EC-5022

Product Identification Numbers

FS-9000-2041-3 GS-2000-5778-3

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

Identified uses

Solvent

1.3. Details of the supplier of the safety data sheet

3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT. Address:

Telephone: +44 (0)1344 858 000 E Mail: tox.uk@mmm.com Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Flammable Liquid, Category 2 - Flam. Liq. 2; H225 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Aspiration Hazard, Category 1 - Asp. Tox. 1; H304 Reproductive Toxicity, Category 2 - Repr. 2; H361 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336 Specific Target Organ Toxicity-Repeated Exposure, Category 1 - STOT RE 1; H372

For full text of H phrases, see Section 16.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Indication of danger

Highly flammable; F; R11

Toxic for reproduction; Repr. Cat. 3; R63

Harmful; Xn; R65 Irritant; Xi; R38 Harmful; Xn; R48/20

R67

For full text of R phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER!

Symbols:

GHS02 (Flame) |GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms







 Ingredient
 CAS Nbr
 % by Wt

 Toluene
 108-88-3
 50 - 60

 Naphtha (petroleum), hydrotreated light
 64742-49-0
 40 - 50

HAZARD STATEMENTS:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure: nervous system sensory

organs

PRECAUTIONARY STATEMENTS

Prevention:

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260A Do not breathe vapours.

P262 Do not get in eyes, on skin, or on clothing.

P280E Wear protective gloves.

Response:

P331 Do NOT induce vomiting.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

P370 + P378G In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or

carbon dioxide to extinguish.

Contains 45% of components with unknown hazards to the aquatic environment.

Dans. 2 of 1

Notes on labelling

Nota P applied to CAS 64742-49-0.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)





Highly Flammable

Contains:

Naphtha (petroleum), hydrotreated light; Toluene

Risk phrases

R11 Highly flammable. R38 Irritating to skin.

R65 Harmful: May cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.

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

Possible risk of harm to the unborn child. R63

Safety phrases

Keep away from sources of ignition - No Smoking. S16

S23A Do not breathe vapour.

S36/37 Wear suitable protective clothing and gloves.

If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or S62

label.

Notes on labelling

Nota P applied to CASRN 64742-49-0.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

CAS Nbr	EU Inventory	% by Wt	Classification
108-88-3	EINECS 203-	50 - 60	Repr.Cat.3:R63; F:R11; Xn:R48/20; Xn:R65; Xi:R38;
	023)		R67 - Nota 4 (EU)
			Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3, H336; STOT RE 1, H372 (CLP)
64742-49-0	EINECS 265- 151-9	40 - 50	Xn:R65 - Nota 4,P (EU) F:R11 (Vendor) Xi:R38; R67 (Self Classified)
	108-88-3	108-88-3 EINECS 203- 625-9 64742-49-0 EINECS 265-	108-88-3 EINECS 203- 50 - 60 625-9 64742-49-0 EINECS 265- 40 - 50

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				Asp. Tox. 1, H304 - Nota P (CLP) Flam. Liq. 2, H225; Skin Irrit. 2, H315; STOT SE 3, H336 (Self Classified)
n-hexane	110-54-3	EINECS 203- 777-6	0.1 - 0.5	Repr.Cat.3:R62; F:R11; Xn:R48/20; Xn:R65; Xi:R38; N:R51/53; R67 - Nota 4 (EU) Flam. Liq. 2, H225; Asp. Tox. 1,
				H304; Skin Irrit. 2, H315; Repr. 2, H361f; STOT SE 3, H336; STOT RE 2, H373; Aquatic Chronic 2, H411 (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

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

See Section 11.1 Information on toxicological effects

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance
Aldehydes.
Hydrocarbons.

Condition

During combustion.

During combustion.

Carbon monoxide.

Carbon dioxide.

During combustion.

During combustion.

During combustion.

During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and

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personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

IngredientCAS NbrAgencyLimit typeAdditional commentsToluene108-88-3UK HSCTWA: 191 mg/m³ (50 ppm):Skin Notation

Toluene 108-88-3 UK HSC TWA: 191 mg/m³ (50 ppm); Skin Notation STEL: 384 mg/m³ (100 ppm)

n-hexane 110-54-3 UK HSC TWA:72 mg/m3(20 ppm)

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Fluoroelastomer	No data available	No data available
Nitrile rubber.	No data available	No data available
Polymer laminate	No data available	No data available

Respiratory protection

In case of inadequate ventilation wear respiratory protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours

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For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance/Odour Colourless, transparent liquid, solvent odour (aromatic)

Odour threshold No data available. pH No data available.

Boiling point/boiling range 60 °C

Melting pointNo data available.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point -11 °C [Test Method:Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.Vapour pressureNo data available.

Relative density 0.76 - 0.8 [Ref Std: WATER=1]

Water solubility Nil

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.Decomposition temperatureNo data available.ViscosityNo data available.

9.2. Other information

Volatile organic compounds (VOC) *No data available.*

Percent volatile 100 %

VOC less H2O & exempt solvents *No data available.*

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Sparks and/or flames.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

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None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

May be harmful if swallowed.

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

	Name	Route	Species	Value	
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Overall product	Inhalation-		No data available; calculated ATE >50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-	Rat	LC50 30 mg/l
	Vapor (4		
	hours)		
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Naphtha (petroleum), hydrotreated light	Dermal	Rabbit	LD50 > 3,160 mg/kg
Naphtha (petroleum), hydrotreated light	Inhalation-	Rat	LC50 > 14.7 mg/l
	Vapor (4		
	hours)		
Naphtha (petroleum), hydrotreated light	Ingestion	Rat	LD50 > 5,000 mg/kg
n-hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
n-hexane	Inhalation-	Rat	LC50 170 mg/l
	Vapor (4		
	hours)		
n-hexane	Ingestion	Rat	LD50 > 28,700 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Toluene	Rabbit	Irritant
Naphtha (petroleum), hydrotreated light	Rabbit	Irritant
n-hexane	Human	Mild irritant
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
Toluene	Rabbit	Moderate irritant
Naphtha (petroleum), hydrotreated light	Rabbit	Mild irritant
n-hexane	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Toluene	Guinea	Not sensitizing
	pig	
Naphtha (petroleum), hydrotreated light	Guinea	Not sensitizing
	pig	
n-hexane	Human	Not sensitizing

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Naphtha (petroleum), hydrotreated light	In Vitro	Not mutagenic
n-hexane	In Vitro	Not mutagenic
n-hexane	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not

			sufficient for classification
Naphtha (petroleum), hydrotreated light	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification
n-hexane	Dermal	Mouse	Not carcinogenic
n-hexane	Inhalation	Mouse	Some positive data exist, but the data are not
			sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
n-hexane	Ingestion	Not toxic to development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
n-hexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	during gestation
n-hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Naphtha (petroleum), hydrotreated light	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Naphtha (petroleum), hydrotreated light	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
n-hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24.6 mg/l	8 hours

Specific Target Organ Toxicity - repeated exposure

-		 								_
I	Name		Route	Target Orga	n(s)	Value	Species	Test result	Exposure	
									Duration	ı

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Toluene	Inhalation	auditory system nervous system eyes olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks
n-hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
n-hexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 months
n-hexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.76 mg/l	6 months
n-hexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 35.2 mg/l	13 weeks
n-hexane	Inhalation	auditory system immune system eyes	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
n-hexane	Inhalation	heart skin endocrine system	All data are negative	Rat	NOAEL 1.76 mg/l	6 months
n-hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
n-hexane	Ingestion	endocrine system hematopoietic system liver immune system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	13 weeks

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Aspiration Hazard

Name	Value
Toluene	Aspiration hazard
Naphtha (petroleum), hydrotreated light	Aspiration hazard
n-hexane	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Sheepshead Minnow	Experimental	28 days	NOEC	3.2 mg/l
n-hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
n-hexane	110-54-3	Water flea	Experimental	48 hours	EC50	>3.9 mg/l
Naphtha (petroleum), hydrotreated light	64742-49-0		Data not available or insufficient for classification			J

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Toluene	108-88-3	Experimental		Photolytic half-	5.38 days (t	Other methods
		Photolysis		life (in air)	1/2)	
n-hexane	110-54-3	Experimental Photolysis		Photolytic half- life (in air)	5.4 days (t 1/2)	Other methods
n-hexane	110-54-3	Experimental Bioconcentrati on	28 days	BOD	100 % weight	OECD 301C - MITI test (I)

12.3: Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Toluene	108-88-3	Experimental Bioconcentrati on		Log Kow	2.73	Other methods
n-hexane	110-54-3	Modeled Bioconcentrati on		Bioaccumulati on factor	138	Other methods
Naphtha (petroleum),	64742-49-0	Data not available or	N/A	N/A	N/A	N/A

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hydrotreated	insufficient for		
light	classification		

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

070104* Other organic solvents, washing liquids and mother liquors

14 06 03* Other solvents and solvent mixtures

20 01 13* Solvents

SECTION 14: Transportation information

FS-9000-2041-3

ADR/RID: UN1993, FLAMMABLE LIQUID, N.O.S., LIMITED QUANTITY, (CONTAINS TOLUENE), 3., II, (E), ADR Classification Code: F1.

IMDG-CODE: UN1993, FLAMMABLE LIQUID, N.O.S., (CONTAINS TOLUENE), 3., II, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SE.

ICAO/IATA: UN1993, FLAMMABLE LIQUID, N.O.S., (CONTAINS TOLUENE), 3., II.

GS-2000-5778-3

ADR/RID: UN1993, FLAMMABLE LIQUID, N.O.S., LIMITED QUANTITY, (TOLUENE), 3., II, (E), ADR Classification Code: F1.

IMDG-CODE: UN1993, FLAMMABLE LIQUID N.O.S., (TOLUENE), 3, II, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SE.

ICAO/IATA: UN1993, FLAMMABLE LIQUID, N.O.S., (TOLUENE), 3., II, LIMITED QUANTITY.

SECTION 15: Regulatory information

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

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Carcinogenicity

IngredientCAS NbrClassificationRegulationToluene108-88-3Gr. 3: Not classifiableInternational Agency
for Research on Cancer

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

List of relevant R-phrases

	1
R11	Highly flammable.
R38	Irritating to skin

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

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

R62 Possible risk of impaired fertility.
 R63 Possible risk of harm to the unborn child.
 R65 Harmful: May cause lung damage if swallowed.
 R67 Vapours may cause drowsiness and dizziness.

Revision information:

Revision Changes:

Safety phrase information was modified.

Section 01: 1.3. Details of the supplier of the safety data sheet heading information was modified.

Copyright information was modified.

Label: CLP Precautionary - Prevention information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Additional Health Effects heading information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Health Effects - Ingestion information information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 11: Single exposure may cause target organ effects heading information was modified.

Section 11: Prolonged or repeated exposure may cause target organ effects heading information was modified.

Section 12: Component ecotoxicity information information was added.

Section 12: Persistence and Degradability information information was added.

Section 12:Bioccumulative potential information information was added.

Section 12: Component Ecotoxicity table Material column header information was added.

Section 12: Component Ecotoxicity table CAS No column header information was added.

Section 12: Component Ecotoxicity table Organism column header information was added.

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Section 12: Component Ecotoxicity table Type column header information was added.
Section 12: Component Ecotoxicity table Exposure column header information was added.
Section 12: Component Ecotoxicity table End point column header information was added.
Section 12: Component Ecotoxicity table Result column header information was added.
Section 12: Persistence and degradability table Material column header information was added.
Section 12: Persistence and degradability table CAS No column header information was added.
Section 12: Persistence and degradability table Test Type column header information was added.
Section 12: Persistence and degradability table Duration column header information was added.
Section 12: Persistence and degradability table Test Result column header information was added.
Section 12: Persistence and degradability table Protocol column header information was added.
Section 12:Bioccumulative potential table Material column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table Test Result column header information was added.
Section 12:Bioccumulative potential table Protocol column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Section 12: Persistence and degradability table Study Type column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Section 11: Aspiration Hazard table - Name heading information was added.
Section 11: Aspiration Hazard table - Value heading information was added.
Section 11: Respiratory Sensitization text information was added.
Section 11: Skin Sensitization table - Name heading information was added.
Section 11: Skin Sensitization table - Species heading information was added.
Section 11: Skin Sensitization table - Value heading information was added.
Section 11: Serious Eye Damage/Irritation table - Name heading information was added.
Section 11: Serious Eye Damage/Irritation table - Species heading information was added.
Section 11: Serious Eye Damage/Irritation table - Value heading information was added.
Section 11: Skin Corrosion/Irritation table - Name heading information was added.
Section 11: Skin Corrosion/Irritation table - Species heading information was added.
Section 11: Skin Corrosion/Irritation table - Value heading information was added.
Section 11: Germ Cell Mutagenicity table - Name heading information was added.
Section 11: Germ Cell Mutagenicity table - Route heading information was added.
Section 11: Germ Cell Mutagenicity table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Name heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Route heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Target Organ(s) heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Species heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Test Result heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Exposure Duration heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Name heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Route heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Target Organ(s) heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Species heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Test Result heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Exposure Duration heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Name heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Route heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Value heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Species heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Test Result heading information was added.
Section 11: Reproductive and/or Developmental Effects text information was added.
Section 11: Carcinogenicity table - Name heading information was added.
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Section 11: Carcinogenicity table - Route heading information was added. Section 11: Carcinogenicity table - Species heading information was added.

Section 11: Carcinogenicity table - Value heading information was added.

Section 8: glove data - Material heading information was added.

Section 8: glove data - Thickness heading information was added.

Section 8: glove data - Breakthrough Time heading information was added.

Section 8: glove data value information was added.

Section 8: Skin protection - recommended gloves information information was deleted.

Prints No Data if Component ecotoxicity information is not present information was deleted.

Prints No Data if Persistence and Degradability information is not present information was deleted.

Prints No Data if Bioccumulative potential information is not present information was deleted.

Section 11: Exposure Duration table heading information was deleted.

Section 11: Test Result table heading information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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