

Revision Date 26.03.2012
Revision 03



SAFETY DATA SHEET NEU-TRI E Solvent

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

1.1. Product identifier

Product name	NEU-TRI E Solvent
Product No.	106437, 102738, 102913
REACH Registration number	01-2119490731-36
REACH Registration notes	Information given concerns the major ingredient.
CAS-No.	79-01-6
EU Index No.	602-027-00-9
EC No.	201-167-4

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

Identified uses	Industrial Solvent
Uses advised against	Aerosol.

1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univareurope.com
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1.4. Emergency telephone number

Emergency Contact Number (Office Hours)	+44 1274 267346
Emergency Contact Number (Outside Office Hours)	+441865 407333
Sds No.	12212

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (67/548/EEC)	Carc. Cat. 2;R45. Muta Cat. 3;R68. Xi;R36/38. R52/53, R67.
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2.2. Label elements

EC No.	201-167-4
Contains	1,2-EPOXYBUTANE TRICHLOROETHYLENE

Labelling



Toxic

NEU-TRI E Solvent

Risk Phrases

R36/38	Irritating to eyes and skin.
R45	May cause cancer.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.
R68	Possible risk of irreversible effects.

Safety Phrases

S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S53	Avoid exposure - obtain special instructions before use.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
P11	Restricted to professional users.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

1,2-EPOXYBUTANE	< 1%
CAS-No.: 106-88-7	EC No.: 203-438-2
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H335 Aquatic Chronic 3 - H412	Classification (67/548/EEC) F;R11 Carc. Cat. 3;R40 Xn;R20/21/22 Xi;R36/37/38 R52/53
TRICHLOROETHYLENE	50-100%
CAS-No.: 79-01-6	EC No.: 201-167-4
	Registration Number: 01-2119490731-36
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Muta. 2 - H341 Carc. 1B - H350 STOT SE 3 - H336 Aquatic Chronic 3 - H412	Classification (67/548/EEC) Carc. Cat. 2;R45 Muta. Cat. 3;R68 Xi;R36/38 R67 R52/53

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

REACH Registration number	01-2119490731-36
REACH Registration notes	Information given concerns the major ingredient.
CAS-No.	79-01-6
EU Index No.	602-027-00-9
EC No.	201-167-4

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Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move into fresh air and keep at rest. Get medical attention.

Ingestion

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation.

Vapours may cause headache, fatigue, dizziness and nausea.

Skin contact

Skin irritation.

Eye contact

Irritation of eyes and mucous membranes.

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

Treat according to symptoms: Symptomatic treatment. Adrenaline and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest. Gastric lavage may be effective when performed within 4 hours of ingestion.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Solvent vapours may form explosive mixtures with air.

Specific hazards

Hydrogen chloride (HCl). Phosgene (COCl₂). Carbon monoxide (CO). Carbon dioxide (CO₂). Chlorine.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

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6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Eliminate all sources of ignition. Protect electric equipment against sparking in case of risk of explosion. Avoid inhalation of vapours/spray and contact with skin and eyes. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Keep in original container. Keep away from heat, sparks and open flame. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy.

Storage Class

Miscellaneous hazardous material 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
NEU-TRI E Solvent	WEL	100 ppm	550 mg/m ³	150 ppm	820 mg/m ³	Carc, Sk
TRICHLOROETHYLENE	WEL	100 ppm(Sk)	550 mg/m ³ (Sk)	150 ppm(Sk)	820 mg/m ³ (Sk)	

WEL = Workplace Exposure Limit.

Carc = Capable of causing cancer and/or heritable genetic damage.

Sk = Can be absorbed through skin.

DNEL

Industry	Inhalation.	Systemic Effects	164.1	mg/m ³
Industry	Inhalation.	Local Effects	164.1	mg/m ³
Industry	Dermal	Long Term	Systemic Effects	7.8 mg/ka/dav
Industry	Inhalation.	Long Term	Systemic Effects	54.7 mg/m ³

PNEC

Freshwater	0.115	mg/l
Marinewater	0.0115	mg/l
Intermittent release	0.208	mg/l
STP	2.6	mg/l
Sediment (Freshwa	2.04	mg/ka
Sediment (Marinew	0.204	mg/ka
Soil	0.344	mg/ka

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Self-contained breathing apparatus.

Hand protection

Gloves of nitrile rubber, PVA or Viton are recommended. EN 374

Eye protection

Wear approved safety goggles. EN 166

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Other Protection

Wear rubber apron. Wear rubber footwear.

Hygiene measures

Wash hands after handling. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Clear
Odour	Sweetish.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	87
Melting point (°C)	-87
Relative density	1.464
Vapour density (air=1)	4.54
Vapour pressure	9.9 kPa @ 25°C
Viscosity	0.58 mPas @ 20°C
Solubility Value (G/100G H ₂ O@20°C)	0.1 @ 25°C
Auto Ignition Temperature (°C)	410
Flammability Limit - Lower(%)	8.0
Flammability Limit - Upper(%)	44.8
Partition Coefficient (N-Octanol/Water)	Pow 2.53

9.2. Other information

Mol. Weight	131.4
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials To Avoid

Strong alkalis. Strong oxidising substances. Powdered metal.

10.6. Hazardous decomposition products

Hydrogen chloride (HCl). Phosgene (COCl₂). Chlorine.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Other Health Effects

Carcinogen Category 2. Mutagen Category 3.

NEU-TRI E Solvent

Acute toxicity:

Acute Toxicity (Oral LD50)

5400 mg/kg Rat

Acute Toxicity (Inhalation LC50)

12500 ppmV (gas) Rat 4 hours

Serious eye damage/irritation:

Moderately Irritating.

Respiratory or skin sensitisation:

Sensitising.

Inhalation

In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion

Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting.

Skin contact

Irritating to skin. Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritating to eyes.

Target Organs

Kidneys Liver

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l 41-67

EC 50, 48 Hrs, Daphnia, mg/l 2.2-100

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Partition coefficient

Pow 2.53

12.4. Mobility in soil

Mobility:

The product has poor water-solubility.

Adsorption/Desorption Coefficient

Koc ~ 50 - 150

Henry's Law Constant

1.03E-02 atm m³/mol

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12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not puncture or incinerate even when empty. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORT INFORMATION

General Full protective clothing should be worn when handling this product.

14.1. UN number

Un Number Road	1710
UN No. (IMDG)	1710
UN No. (ICAO)	1710

14.2. UN proper shipping name

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

ADR/RID/ADN Class	6.1
ADR/RID/ADN Class	Class 6.1: Toxic substances.
ADR Label No.	6.1
IMDG Class	6.1
ICAO Class/Division	6.1

Transport Labels



14.4. Packing group

ADR/RID/ADN 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

EMS	F-A, S-A
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NEU-TRI E Solvent

Emergency Action Code 2Z
 Hazard No. (ADR) 60
 Tunnel Restriction Code (E)

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

No information required.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 26.03.2012
 Revision 03
 SDS No. 12212
 Safety Data Sheet Status Approved.
 Date 26.3.2012
 Signature P Cooper

Risk Phrases In Full

R11 Highly flammable
 R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
 R36/37/38 Irritating to eyes, respiratory system and skin.
 R36/38 Irritating to eyes and skin.
 R40 Limited evidence of a carcinogenic effect.
 R45 May cause cancer.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R67 Vapours may cause drowsiness and dizziness.
 R68 Possible risk of irreversible effects.

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Hazard Statements In Full

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.