NA Line Marker

Safety Data Sheet

According to Regulation (EU) No 830/2015 and Regulation (EC) No 1272/2008
Date Revised: 19/08/2021 / Version: 1.1

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

1.1. Product identifier

Trade Name: NA Line Marker

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

Identified Uses:

This Marking Paint is a quick drying, durable spray line marking paint specially formulated for us on roads, carparks, sporting elds and courts and in factories and warehouses.

Uses advised against:

No data available

Reason why uses advised against:

No data available

1.3. Details of the supplier of the safety data sheet

Company Name: ProSolve

Company Address: Sandall Stones Road, Kirk Sandall Industrial Estate, Doncaster, South Yorkshire, DN3 1QR

Tel: +44 (0) 1302 310 113

E-mail: enquiries@prosolveproducts.com

Web: www.prosolveproducts.com

EU Details:

Address: Portfolio House, Kilbarrack Parage, Dublin D05 TF86

Phone: 003531 9120925

1.4. Emergency Telephone Number

National Health Service (NHS)

NHS England or Scotland: 111

NHS Wales: 0300 0604400

Northern Ireland: Call your local GP

For life-threatening emergencies, call 999 for an ambulance.

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Flam. Gas 1,H220

Press. Gas (Liq.),H280

Skin Irrit. 2,H315

Eye Irrit. 2,H319 Repr. 2,H361

2.1.2. Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements Hazard pictograms:

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram(s):

Signal word: Danger

Hazard statement(s)

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P403 Store in a well-ventilated place.

P337+P313 If eye irritation persists: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard information (EU):

no data available

2.3. Other hazards

No data available

SECTION 3: Composition / Information On Ingredients

3.1. Substances:

N/A

3.2. Mixtures Description: Multi Component Mixture

Chemical name	Common names and synonyms	CAS number	EC number	Registration number	Classification according to Regulation (EC)No 1278/2008(CLP)	Concentration
Dimethyl ether	Dimethyl ether	115-10-6	204-065-8	-	Press. Gas (Liq.),H280;Flam. Gas 1,H220	40%
-	Pigment	-	-	-	no data available	19%
-	Resin	-	-	-	no data available	16%
Ethyl acetate	Ethyl acetate	141-78-6	205-500-4	-	Flam. Liq. 2,H225;Eye Irrit. 2,H319;STOT SE 3,H335,H336	9%
Toluene	Toluene	108-88-3	203-625-9	-	Flam. Liq. 2,H225;Skin Irrit. 2,H315;Asp. Tox. 1,H304;STOT SE 3,H335,H336;STOT RE 2,H373;Repr. 2,H361	8%
Trimethylbenzene	trimethyl Benzene	25551-13-7	247-099-9	-	Flam. Liq. 3,H226;Acute Tox. 4,H302;Acute Tox. 4,H312;Skin Irrit. 2,H315;Eye Irrit. 2,H319	5%
Xylene	Xylene	1330-20-7	215-535-7	-	Flam. Liq. 3,H226;Acute Tox. 4,H312;Skin Irrit. 2,H315;Acute Tox. 4,H332	1.8%
2-butoxyethanol	2-Butoxyethanol	111-76-2	203-905-0	-	Acute Tox. 4,H302;Acute Tox. 4,H312;Skin Irrit. 2,H315;Eye Irrit. 2,H319;Acute Tox. 4,H332	1.2%

SECTION 4: First Aid Measures

4.1. Description of first aid measures

General notes

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

Following inhalation

Fresh air, rest. Refer for medical attention.

In case of skin contact

ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Rinse skin with plenty of water or shower.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

If swallowed

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Centre immediately.

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

Inhalation produces some anaesthesia (but less than that of ethyl ether), blurring of vision, headache, intoxication, loss of consciousness. Liquid or concentrated vapor irritates eyes. Contact of liquid with skin may cause frostbite. (USCG, 1999)

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

INHALATION**:** Symptoms: Cough. Sore throat. Confusion. Drowsiness. Unconsciousness. First aid: Fresh air, rest. Refer for medical attention. SKIN: Symptoms: ON CONTACT WITH LIQUID: FROSTBITE. First aid: ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Rinse skin with plenty of water or shower. EYES: Symptoms: Redness. Pain. First aid: First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

SECTION 5: Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position. Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with dry powder, carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Extremely flammable. Gas/air mixtures are explosive.

5.3. Advice for fire-fighters

Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out. In other cases extinguish with dry powder, carbon dioxide. In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate danger area! Consult an expert! Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Remove all ignition sources.

6.2. Environmental protection measures

Evacuate danger area! Consult an expert! Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Remove all ignition sources.

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources. Stop or control the leak, if this can be done without undue risk. Use water spray to cool & disperse vapours, protect personnel, & dilute spills to form non-flammable mixtures. Control runoff & isolate discharged material for proper disposal.

6.4. Reference to other sections

For disposal suggestions see section 13. For exposure controls / personal protection suggestions see section 8.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

NO open flames, NO sparks and NO smoking. NO contact with hot surfaces. Closed system, ventilation, explosion-proof electrical equipment and lighting.

7.2. Conditions for safe storage, including any incompatibilities

Fireproof. Cool.

7.3. Specific end uses:

Main uses of the chemical are mentioned in section 1.2. No other specific uses are stipulated.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control parameters

Occupational exposure limits

EU-OEL: 1920 mg/m3, 1000 ppm as TWA.MAK: 1900 mg/m3, 1000 ppm; peak limitation category: II(8); pregnancy risk group: D

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk- elimination area.

8.2.2. Individual protection measures, such as personal protective equipment Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

8.2.3. Environmental exposure controls

See section 6.2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance:

Liquid**.**

Odour pure:

CAS 115-10-6: Slight ethereal odor;pure CAS 141-78-6: CHARACTERISTIC ETHER- LIKE ODOR REMINISCENT OF PINEAPPLE.;pure CAS 111-76-2: Mild, ether-like odor

Odour threshold:

Pure CAS 141-78-6: Ethyl acetate has a fruity odor and an odor threshold of 3.9 ppm.;pure CAS 111-76-2: Odour perception threshold is 9.3 mg/L.

pH :

No data available

Melting point/freezing point:

Pure CAS 115-10-6: -141.5°C;pure CAS 141-78-6: -84°C;pure CAS 108-88-3: -95°C;pure CAS

25551-13-7: -25 - 45°C;pure CAS 1330-20-7: -34ºC;pure CAS 111-76-2: -75°C

Initial boiling point and boiling range

Pure CAS 115-10-6: -23.6°C;pure CAS 141-78-6: 77°C;pure CAS 108-88-3: 111°C;pure CAS 25551-13-7: 165-176°C;pure CAS 1330-20-7: 137-140°C(lit.);pure CAS 111-76-2: 171°C

Flash point:

Pure CAS 115-10-6: Flammable gas;pure CAS 141-78-6: -4°C c.c.;pure CAS 108-88-3: 4°C c.c.;pure CAS 25551-13-7: 44-53°C c.c.;pure CAS 1330-20-7: 25°C;pure CAS 111-76-2: 60°C c.c.

Evaporation rate:

no data available

Flammability:

Pure CAS 115-10-6: Extremely flammable.;pure CAS 141-78-6: Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.;pure CAS 111-76-2: Class IIIA Combustible Liquid: Fl.P. at or above 140°F and below 200°F.

Upper/lower flammability or explosive:

Pure CAS 115-10-6: Lower flammable limit:3.4% by volume; Upper flammable limit: 27.0% by limits volume;pure CAS 141-78-6: Lower 2.2%; upper 11.5% by volume in air;pure CAS 111-76-2: Lower flammable limit: 1.1% by volume @ 93 deg C; Upper flammable limit:12.7% by volume @ 135 deg C.

Vapour pressure:

Pure CAS 115-10-6: >760 mm Hg (25 °C);pure CAS 141-78-6: 10 kPa(20°C);pure CAS 108-88-3: 3.8 kPa(25°C);pure CAS 25551-13-7: 0.18 - 0.25 kPa(20°C);pure CAS 1330-20-7: 18 mm Hg (37.7 °C);pure CAS 111-76-2: 0.10 kPa(20°C)

Vapour density:

Pure CAS 115-10-6: 1.62 (vs air);pure CAS 141-78-6: 3 (20 °C, vs air);pure CAS 108-88-3: 3.2 (vs air);pure CAS 1330-20-7: 3.7 (vs air);pure CAS 111-76-2: 4.1 (vs air)

Relative density:

Pure CAS 115-10-6: 0.61;pure CAS 141-78-6: 0.9;pure CAS 108-88-3: 0.87;pure CAS 25551-13-7: 0.86-0.89;pure CAS 1330-20-7: 0.86g/mLat 25°C(lit.);pure CAS 111-76-2: 0.9

Solubility(ies):

Pure CAS 115-10-6: Solubility in water, g/100ml: 2.4 ;pure CAS 141-78-6: Solubility in water, g/100ml at 20°C: 8.7 (poor);pure CAS 108-88-3: In water: 0.5 g/L (20 ºC);pure CAS 25551-13- 7: Solubility in water: very poor; pure CAS 111-76-2: Solubility in water: miscible

Partition coefficient n-octanol/water:

Pure CAS 115-10-6: 0.1;pure CAS 141-78-6: 0.73;pure CAS 108-88-3: 2.69;pure CAS 25551-13-7: 3.4/3.8;pure CAS 111-76-2: 0.83

Auto-ignition temperature**:**

Pure CAS 115-10-6: 350°C;pure CAS 141-78-6: 427°C;pure CAS 108-88-3: 480°C;pure CAS

25551-13-7: 470-550°C;pure CAS 1330-20-7: 867°F;pure CAS 111-76-2: 238°C

Decomposition temperature:

No data available

Viscosity:

Pure CAS 115-10-6: 825 at 0 deg C;pure CAS 141-78-6: 0.423 mPa.s at 25 deg C; pure CAS 111-76-2: kinematic viscosity (in mm²/s) = 6.746. Temperature:0.0°C.;kinematic viscosity (in mm²/s) = 4.89. Temperature:10.0°C.;kinematic viscosity (in mm²/s) = 3.642. Temperature:20°C.

Explosive properties

Pure CAS 115-10-6: Gas/air mixtures are explosive.; pure CAS 141-78-6: Vapour/air mixtures are explosive. Heating will cause rise in pressure with risk of bursting.; pure CAS 111-76-2: Above 60°C explosive vapour/air mixtures may be formed.

Oxidising properties:

No data available

9.2. Other information

No data available

SECTION 10: Stability and Reactivity

10.1. Reactivity

The substance can form explosive peroxides under the influence of light and air. On combustion, forms irritating fumes. Reacts with oxidants.

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

The gas is heavier than air and may travel along the ground; distant ignition possible. The gas is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen.The substance can form explosive peroxides under the influence of light and air. On combustion, forms irritating fumes. Reacts with oxidants.

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Forms explosive mixture with air. Forms unstable peroxides in containers that been opened or remain in storage for more than 6 months. Peroxides can be detonated by friction, impact or heating. Violent reaction with strong oxidizers, aluminium hydride, lithium aluminium hydride. Keep away from heat, air, sunlight.

10.6.

Hazardous decomposition products

When heated to decomposition it emits acrid smoke and irritating fumes.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Oral: pure CAS 141-78-6: LD50 - rat (female) - 11.3 mL/kg bw. Remarks:No data on confidence limits. LD50 is equivalent to 10,200 mg/kg.;pure CAS 111-76-2: LD50 - guinea pig (male/female) - 1 414 mg/kg bw.

Inhalation: pure CAS 115-10-6: LC50 Mouse inhalation 385.94 ppm (30 min);pure CAS 141-78-6: LC50 Mouse inhalation 1500 ppm/4hr;pure CAS 111-76-2: LC50 - rat (female) - 450 ppm.

Dermal:

Pure CAS 111-76-2: LD0 - guinea pig (male/female) - > 2 000 mg/kg bw.

Skin corrosion/irritation:

no data available

Serious eye damage/irritation:

no data available

Respiratory or skin sensitization:

no data available

Carcinogenicity:

Cancer Classification: Group D Not Classifiable as to Human Carcinogenicity

Reproductive toxicity:

no data available

STOT-single exposure:

pure CAS 115-10-6: The substance is irritating to the eyes and respiratory tract. Rapid evaporation of the liquid may cause frostbite. The substance may cause effects on the central nervous system. Exposure could cause lowering of consciousness.; pure CAS 141-78-6: The substance is mildly irritating to the eyes and respiratory tract. The substance may cause effects on the central nervous system. Exposure far above the OEL could cause lowering of consciousness.; pure CAS 108-88-3: The substance is irritating to the eyes and respiratory tract.

The substance may cause effects on the central nervous system. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. Exposure at high levels could

cause cardiac dysrhythmia and unconsciousness.; pure CAS 25551-13-7: The substance is irritating to the eyes, skin and respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system.; pure CAS 111-76-2: The substance is irritating to the eyes, skin and respiratory tract. The substance may cause effects on the central nervous system, blood, kidneys and liver.

STOT-repeated exposure

pure CAS 141-78-6: The substance defats the skin, which may cause dryness or cracking.; pure CAS 108-88-3: The substance defats the skin, which may cause dryness or cracking. The substance may have effects on the central nervous system. Exposure to the substance may increase noise-induced hearing loss. Animal tests show that this substance possibly causes toxicity to human reproduction or development.; pure CAS 25551-13-7: The substance defats the skin, which may cause dryness or cracking. Repeated or prolonged inhalation may cause effects on the lungs. This may result in chronic bronchitis. The substance may have effects on the blood and central nervous system. See Notes.; pure CAS 111-76-2: The substance defats the skin, which may cause dryness or cracking**.**

Aspiration hazard

pure CAS 115-10-6: On loss of containment, a harmful concentration of this gas in the air will be reached very quickly, especially in confined spaces.;pure CAS 141-78-6: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.;pure CAS 108-88-3: A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.;pure CAS 25551-13-7: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.; pure CAS 111-76-2: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity to fish:

Pure CAS 141-78-6: LC50; Species: Pimephales promelas (Fathead minnow) age 29-30 days, length 18.2 mm, weight 0.106 g; Conditions: freshwater, flow through, 24.3 deg C, pH 7.4, hardness 45.0 mg/L CaCO3, alkalinity 37.0 mg/L CaCO3, dissolved oxygen 6.7 mg/L; Concentration: 230000 ug/L for 96 hr (95% confidence interval: 220000-250000 ug/L) /99+% purity; pure CAS 111-76-2: LC50 - Oncorhynchus mykiss (previous name: Salmo gairdneri) - 1 474 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates:

Pure CAS 141-78-6: IC50 - Artemia salina - 346 mg/L - 24 h.;pure CAS 111-76-2: EC50 - Daphnia magna - 1 550 mg/L - 48 h.

Toxicity to algae:

Pure CAS 141-78-6: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - 5 600 mg/L - 48 h.;pure CAS 111-76-2: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - 911 mg/L - 72 h.

Toxicity to microorganisms:

Pure CAS 111-76-2: Toxicity threshold (TT) or EC3 - Pseudomonas putida - 700 mg/L - 16 h.

12.2. Persistence and degradability

AEROBIC: Dimethyl ether, at 100 mg/L reached 0 to 1% of its theoretical BOD in 4 weeks using an activated sludge inoculum at 30 mg/L and the Japanese MITI test(1).

12.3. Bioaccumulative potential

An estimated BCF of 3 was calculated for dimethyl ether(SRC), using a log Kow of 0.10(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4. Mobility in soil

The Koc of dimethyl ether is estimated as approximately 27(SRC), using a log Kow of 0.10(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated Koc value suggests that dimethyl ether is expected to have very high mobility in soil(SRC).

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product:

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging:

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport Information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

ADR/RID: UN1950 IMDG: UN1950 IATA: UN1950

14.2. UN proper shipping name

ADR/RID: AEROSOLS

IMDG: AEROSOLS

IATA: AEROSOLS

14.3. Transport hazard class(es)

ADR/RID: 2 IMDG: 2 IATA: 2

14.4. Packing group

ADR/RID: IMDG: IATA:

14.5. Environmental hazards

ADR/RID: No IMDG: No IATA: No

14.6. Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Additional Regulatory Information

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

Chemical name	Common names and synonyms	CAS number	EC number
Dimethyl ether	Dimethyl ether	115-10-6	204-065-8
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
-	Pigment	-	-
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
-	Resin	-	-
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
Ethyl acetate	Ethyl acetate	141-78-6	205-500-4
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
Toluene	Toluene	108-88-3	203-625-9
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
Trimethylbenzene	trimethyl Benzene	25551-13-7	247-099-9
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
Xylene	Xylene	1330-20-7	215-535-7
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Indication of changes

Version 1.0 Initial issue.

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

Key literature references and sources for data

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/ eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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

Flam. Gas 1,H220	Flammable gases, Category 1
Press. Gas (Liq.),H280	Gases under pressure: Liquefied gas
Skin Irrit. 2,H315	Skin irritation, Category 2
Eye Irrit. 2,H319	Eye irritation, Category 2
Repr. 2,H361	Reproductive toxicity, Category 2
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Advice on any training appropriate for workers to ensure protection of human health and the environment

Provide sufficient information, guidance and training to operating personnel.

Other Information

Check oxygen content before entering area. High concentrations in the air cause a deficiency of oxygen with the risk of unconsciousness or death. Check for peroxides prior to distillation; eliminate if found.

This information is provided for documentation purposes only. This product is not considered hazardous under normal conditions of use.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein believed to be true and accurate. However, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of information, the hazards connected with the use of material or the results to be obtained from the use thereof. Compliance with all applicable federal, state and local laws and local regulations remains the responsibility of the user. This material safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. Please note that due to the on-going change in regulation from CHIP to CLP, any MSDS information in this MSDS is only considered accurate at the time of its creation. During this time classifications of substances may change. Therefore it is possible that can art work and MSDS information may differ. As such if you have any concerns we recommend you request a new MSDS from us every 6-12 months.