

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 1 of 10

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

1.1. Product identifier

2P-10 Debonder

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

Use of the substance/mixture

Industrial and professional use.

Uses advised against

any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: FastCap LLC
Place: 5016 Ferndale, WA 98248, USA
Telephone: +1 360-752-2138
Internet: www.fastcap.com
Responsible Department: info@fastcap.com

1.4. Emergency telephone number:

Chemtrec (Domestic North America): +1 800-424-9300
Chemtrec (International): +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 3
Acute toxicity: Acute Tox. 4
Hazard Statements:
Flammable liquid and vapour.
Harmful if swallowed.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazardous components which must be listed on the label
nitrocarbol

Signal word: Warning

Pictograms:



Hazard statements

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 2 of 10

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|---------|---|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 75-52-5 | nitrocarbol | | | 80 -90 % |
| | 200-876-6 | 609-036-00-7 | | |
| | Flam. Liq. 3, Acute Tox. 4; H226 H302 | | | |

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove affected person from the danger area and lay down. Provide fresh air. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Call a physician immediately.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Do not subject to friction.

After ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. If swallowed, immediately drink: milk. Water. Caution if victim vomits: Risk of aspiration! Call a physician immediately.

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

Handling larger quantities.: Inhalation causes narcotic effects/intoxication.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide. Extinguishing powder. alcohol resistant foam. Dry extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 3 of 10

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment. (See section 8.) Remove all sources of ignition. Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains.

6.3. Methods and material for containment and cleaning up

Remove all sources of ignition. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Ventilate affected area.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Take precautionary measures against static discharges. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Use only antistatically equipped (spark-free) tools.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Heating causes rise in pressure with risk of bursting.

Further information on handling

Protect against: UV-radiation/sunlight. Flammable vapours can accumulate in head space of closed systems. Handle with care - avoid bumps, friction and impact. General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep under nitrogen.

Advice on storage compatibility

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Handle with care - avoid bumps, friction and impact.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 4 of 10

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|---------|--------------|-----|-------------------|-----------|---------------|--------|
| 75-52-5 | Nitromethane | 100 | 254 | | TWA (8 h) | WEL |
| | | 150 | 381 | | STEL (15 min) | WEL |

8.2. Exposure controls



Appropriate engineering controls

Use only in well-ventilated areas.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 480 min.

penetration time (maximum wearing period): \geq ~160 min.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

insufficient ventilation.

exceeding exposure limit values

Generation/formation of aerosols

Suitable respiratory protective equipment:

gas filtering equipment (EN 141). Type : A

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Environmental exposure controls

The usual precautions for handling chemicals should be considered.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|----------------|
| Physical state: | liquid |
| Colour: | colourless |
| Odour: | characteristic |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 5 of 10

Test method

pH-Value: not determined

Changes in the physical state

Melting point: -29 (nitrocarbol) °C

Initial boiling point and boiling range: 101 (nitrocarbol) °C

Flash point: 36 (nitrocarbol) °C

Sustaining combustion: No data available

Explosive properties

not determined

Lower explosion limits: 7,1 (nitrocarbol) vol. %

Upper explosion limits: 63 (nitrocarbol) vol. %

Ignition temperature: 415 (nitrocarbol) °C

Decomposition temperature: not determined

Oxidizing properties

none

Vapour pressure:
(at 20 °C) 36 (nitrocarbol) hPa

Vapour pressure:
(at 50 °C) 155 (nitrocarbol) hPa

Density: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Flow time: not determined

Vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: 80-90%

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Risk of explosion by shock, friction, fire or other sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Reacts with : Acid. Strong acid. amines. aldehydes. ketone. Base. Lead. Acetone. metal. copper. Reducing agent.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 6 of 10

10.6. Hazardous decomposition products

In use, may form flammable/explosive vapour-air mixture. Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1044,4 mg/kg

| CAS No | Chemical name | | | | |
|---------|-------------------------|--------------|--------------|---------|--------------|
| | Exposure routes | Method | Dose | Species | Source |
| 75-52-5 | nitrocarbol | | | | |
| | oral | LD50 | 940 mg/kg | Rat | GESTIS |
| | dermal | LD50 | >2000 mg/kg | Rabbit | ECHA Dossier |
| | inhalative (1 h) vapour | LC50 mg/l | [LCLo>12,75] | Rat | ECHA Dossier |

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Irritant effect on the eye: slightly irritant but not relevant for classification.

Irritant effect on the skin: Not an irritant.

Sensitising effects

Based on available data, the classification criteria are not met.

no danger of sensitization.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

nitrocarbol:

Chronic inhalative toxicity

Exposure time: 24 months.

Species: Rat

Results: NOAEC: >200ppm

literature information ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

nitrocarbol:

In-vitro mutagenicity:

Method:

- OECD Guideline 471 (Bacterial Reverse Mutation Assay) (reliability scoring based on 1997 guideline)

- OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

Result: negative.

literature information: ECHA dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 7 of 10

Specific effects in experiment on an animal

No information available.

SECTION 12: Ecological information

12.1. Toxicity

| CAS No | Chemical name | Method | Dose | [h] [d] | Species | Source |
|---------|--------------------------|--------|-----------|-----------|---------------------------------|--------------|
| 75-52-5 | nitrocarbol | | | | | |
| | Acute fish toxicity | LC50 | >659 mg/l | 96 h | Pimephales promelas | ECHA Dossier |
| | Acute algae toxicity | ErC50 | >102 mg/l | 72 h | Pseudokirchneriella subcapitata | ECHA Dossier |
| | Acute crustacea toxicity | EC50 | >103 mg/l | 48 h | Daphnia magna | ECHA Dossier |

12.2. Persistence and degradability

| CAS No | Chemical name | Method | Value | d | Source |
|---------|---|------------|-------|----|--------------|
| | | Evaluation | | | |
| 75-52-5 | nitrocarbol | | | | |
| | OECD 301D / EEC 92/69 annex V, C.4-E | | 9,9% | 28 | ECHA Dossier |
| | Not easily bio-degradable (according to OECD-criteria). | | | | |

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|---------|---------------|---------|
| 75-52-5 | nitrocarbol | 0,17 |

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances
Classified as hazardous waste.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 8 of 10

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1261
14.2. UN proper shipping name: NITROMETHANE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1261
14.2. UN proper shipping name: NITROMETHANE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1261
14.2. UN proper shipping name: NITROMETHANE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Marine pollutant: NO
 Special Provisions: 26

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 9 of 10

Limited quantity: 1 L
 Excepted quantity: E0
 EmS: F-E, S-D

Air transport (ICAO)

14.1. UN number: UN 1261
14.2. UN proper shipping name: NITROMETHANE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Special Provisions: A1 A39
 Limited quantity Passenger: Forbidden
 Passenger LQ: Forbidden
 Excepted quantity: E0
 IATA-packing instructions - Passenger: Forbidden
 IATA-max. quantity - Passenger: Forbidden
 IATA-packing instructions - Cargo: 364
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

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

not applicable.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): < 90% (calculated.)
 2004/42/EC (VOC): not determined
 Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

Additional information:

Additional information

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].
 REACH 1907/2006 Appendix XVII: 3

National regulatory information

Employment restrictions: Observe employment restrictions for young people.
 Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Rev. 1.0 Initial release 2.10.2015

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2P-10 Debonder

Revision date: November 2015

2P-10 DEBONDER

Page 10 of 10

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
 CAS Chemical Abstracts Service
 DNEL: Derived No Effect Level
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect level
 NTP: National Toxicology Program
 N/A: not applicable
 OSHA: Concerning the International Transport of Dangerous Goods by Rail)
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 SARA: Superfund Amendments and Reauthorization Act
 SVHC: substance of very high concern
 TRGS Technische Regeln für Gefahrstoffe
 TSCA: Toxic Substances Control Act
 VOC: Volatile Organic Compounds
 VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
 WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)