Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

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

1.1 Product identifier

Trade name: Penetrant HM-704

- · UFI: 1X32-90GU-D002-QD28
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Penetrant
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Supplier:

BabbCo SA SherwinBabbCo

15, rue des Frères Lumière Z.I. des EBISOIRES 78370 PLAISIR (France)

Tel: +33 (0)1.30.80.81.82 Tel: +33 (0)1.30.80.81.98

e-mail: regulatoryservice@babbco.fr

http://www.babbco.fr

Manufacturer:

NDT Europa BV damsluisweg 77

1332 EB almere / the netherlands

phone +31 (0) 36 5495000 e-mail: info@ndt-europa.nl http://www.ndt-europa.nl

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Tel: +33 (0)1.40.05.48.48 (Centre anti-poison de Paris)

Tel: +33 (0)1.30.80.81.98

Additional information:

Attention Medical Authorities,

In accordance with law, to the best of its knowledge, and in good faith, SherwinBabb Co herewith indicates known, or possible, risks

arising from the use of the product described below.

There may be similar products on the market for which the suppliers have not indicated certain risks.

Suppliers are responsible for completing SDS forms in a manner that:

- does not give a product's user a false sense of security concerning the product's risks, or which,
- misrepresents the product in a manner that could be construed as unfair competition, or which,
- could lead to legal proceedings against the supplier.

Please contact us to answer any questions, or for additional information, concerning this document, or the product(s) described.

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Eye Dam. 1 H318 Causes serious eye damage.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

Secondary alcohol ethoxylates (4)

Secondary alcohol ethoxylates (3)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 1)

· Hazard statements

H318 Causes serious eye damage.

· Precautionary statements

P280 Wear eye protection / face protection.

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

Continue rinsing.

P310 Immediately call a doctor.

- 2.3 Other hazards See Chapters 3 and 15 for details.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

Dangerous comp	onents:	
CAS: 68131-40-8 Reg.nr.: polymer	Secondary alcohol ethoxylates (4)	10-25%
CAS: 68131-40-8 Reg.nr.: polymer	Secondary alcohol ethoxylates (3)	2,5-10%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Remove contaminated clothing.

- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

Water haze

Foam

ABC powder

- · For safety reasons unsuitable extinguishing agents: Water spray
- 5.2 Special hazards arising from the substance or mixture

Carbon monoxide and carbon dioxide

No further relevant information available.

- 5.3 Advice for firefighters
- Special protective equipment for fire-fighters:

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

(Contd. on page 3)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 2)

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about fire and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:

Respiratory protection:

When using a liquid based on organic compound:

- Recommended for organic vapour (type A)

When using a dry powder:

- Recommended for particulate filters (type P)
- Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves Natural rubber, NR
- Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 3)

Eye/face protection



Tightly sealed goggles

· Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

· Physical state

Colour: Yellow fluorescent Odour: Characteristic **Odour threshold:** Not determined. • Melting point/freezing point: Undetermined. Boiling point or initial boiling point and boiling range 250 °C **Flammability** Not applicable.

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined. Flash point: > 93 °C (ASTM D-93) **Decomposition temperature:** Not determined.

pH at 20 °C

· Viscosity:

Kinematic viscosity at 40 °C 25 mm²/s (ASTM D-445)

Dynamic: Not determined.

Solubility

·water: Not determined. Partition coefficient n-octanol/water (log value) Not determined. · Vapour pressure: Not determined.

Density and/or relative density

Density at 20 °C: 0,974 g/cm3 (ASTM D-1298)

Relative density Not determined. Vapour density Not determined.

9.2 Other information

Appearance:

· Form: Fluid · Important information on protection of health and

environment, and on safety.

Ignition temperature: Product is not selfianiting.

Explosive properties: Product does not present an explosion hazard.

Solvent content:

VOC (1999/13/EG) 0.00 %

Change in condition

Flammable solids

Evaporation rate Not determined.

Information with regard to physical hazard classes

 Explosives not applicable Flammable gases not applicable Aerosols not applicable Oxidising gases not applicable Gases under pressure not applicable Flammable liquids not applicable

not applicable

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 4)

Self-reactive substances and mixtures	not applicable
Pyrophoric liquids	not applicable
Pyrophoric solids	not applicable
Self-heating substances and mixtures	not applicable

Substances and mixtures, which emit flammable gases in

contact with water not applicable

Oxidising liquids not applicable

Oxidising solids not applicable

Organic peroxides not applicable

Corrosive to metals not applicable

not applicable
not applicable
not applicable

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Stable at environment temperature.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

Information on hazardous ingredients

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

- LD/LC50 values relevant for classification:
- CAS: 68131-40-8 Secondary alcohol ethoxylates (4)

Oral LD50 1.800 mg/kg (rat)

CAS: 68131-40-8 Secondary alcohol ethoxylates (3)

Oral LD50 2.600 mg/kg (rat)

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity:

Information on hazardous ingredients

(Contd. on page 6)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 5)

	(
CAS: 68131-40-8 Secondary alcohol ethoxylates (4)	
LC50/ 96 h 1-10 mg/l (Fish)	
EC50/ 48 h 4,1 mg/l (daphnia)	
CAS: 68131-40-8 Secondary alcohol ethoxylates (3)	
LC50/ 96 h 1-10 mg/l (Fish)	
EC50/ 48 h 3,1 mg/l (daphnia)	

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- Remark:

Secondary alcohol ethoxylates: This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents

- Additional ecological information:
- General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Waste/ unused products

Collect all waste in suitable and labelled containers and dispose according to local legislation.

- · European waste catalogue 07 07 04
- **Uncleaned packaging:**
- **Recommendation:**

Waste / used products

Waste products and empty packages dispose of in accordance with local regulations.

* Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information 14.1 UN number or ID number ADR, IMDG, IATA not applicable 14.2 UN proper shipping name · ADR, IMDG, IATA not applicable 14.3 Transport hazard class(es) ADR, IMDG, IATA · Class not applicable 14.4 Packing group ADR, IMDG, IATA not applicable 14.5 Environmental hazards: Marine pollutant: No 14.6 Special precautions for user Not applicable.

(Contd. on page 7)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

(Contd. of page 6)

· 14.7 Maritime transport in bulk according to IMO instruments Not applicable. · Transport/Additional information: Not dangerous according to the above specifications.		(Conta. or pag	00,
• Transport/Additional information: Not dangerous according to the above specifications.	· 14.7 Maritime transport in bulk according to IMO		
	instruments	Not applicable.	
	· Transport/Additional information:	Not dangerous according to the above specifications.	
* UN "Model Regulation": not applicable	· UN "Model Regulation":	not applicable	

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- **REGULATION (EU) 2019/1148**
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards

and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

European regulation (REACH) requires that in paragraph 16 all H sentences dealing with raw materials appearing in paragraph 2 and 3 be written. This regulation states which sentences will finally be written on labels (paragraph 3) depending on the respective concentration of every raw material in the preparation. That's why some or all of the sentences or signs shows in paragraph 16 may not be written on the label. BabbCo complies with the law. Any MSDS with the H sentences of the raw material not shown in the paragraph 16 does not comply with regulation.

Relevant phrases

H302 Harmful if swallowed.

H318 Causes serious eye damage.

- · Prepared by NDT Europa BV
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

(Contd. on page 8)

Revision date: 28.07.2023 v. 1 Date of issue: 28.07.2023

Trade name: Penetrant HM-704

CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
VPVB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

(Contd. of page 7)