



Safety Data Sheet dated 26/1/2023, Edition 2 - version 2
Regulation (EU) n. 2020/878

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

1.1. Product identifier

Identification of the mixture:

Trade name: THINNER 698
Trade code: 698.000

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

Thinner.

1.3. Details of the supplier of the safety data sheet

Company:

BOERO BARTOLOMEO S.p.A. - Via Macaggi 19 - 16121 Genova - Tel. +39 010 55001 - Fax +39 010 5500305 - CF/P. IVA/REG. IMPRESE DI GENOVA 00267120103

Competent person responsible for the safety data sheet:

sicurezzaprodotti@boero.it

1.4. Emergency telephone number

BOERO BARTOLOMEO S.p.A. - Tel.+39 010 55001
opening hours: Monday - Tuesday 9.00 am - 5.00 pm

UK: in an emergency the enquirer should call NHS 111/24/Direct (free-to-call medical helplines) or a doctor.

MALTA: tel. 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Flam. Liq. 2, H225 Highly flammable liquid and vapour.

Acute Tox. 4, H302 Harmful if swallowed.

Acute Tox. 4, H332 Harmful if inhaled.

Eye Irrit. 2, H319 Causes serious eye irritation.

STOT SE 3, H336 May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

H302+H332 Harmful if swallowed or if inhaled.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements:

698.000/2

Page n. 1 of 11

Safety Data Sheet

THINNER 698

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 Use only outdoors or in a well-ventilated area.
P370+P378 In case of fire use CO₂ or chemical powder. Never use water.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container according to local regulations.

Special Provisions:

PACK2 The packing must have tactile indications of danger for blind people.

Contains

heptan-2-one; methyl amyl ketone
ethyl acetate

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

Adverse physicochemical, human health and environmental effects:

The main adverse physical-chemical effects for human health and the environment are listed in accordance with Sections 9 to 12 of the safety data sheet

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

$\geq 34\%$ - $< 50\%$ heptan-2-one; methyl amyl ketone

REACH No.: 01-2119902391-49-XXXX, Index number: 606-024-00-3, CAS: 110-43-0, EC: 203-767-1

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Flam. Liq. 3 H226 Flammable liquid and vapour.

STOT SE 3 H336 May cause drowsiness or dizziness.

$\geq 25\%$ - $< 30\%$ ethyl acetate

REACH No.: 01-2119475103-46-XXXX, Index number: 607-022-00-5, CAS: 141-78-6, EC: 205-500-4

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

698.000/2

Page n. 2 of 11

Safety Data Sheet

THINNER 698

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

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

Harmful if swallowed.

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

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire use CO₂ or chemical powder. Never use water.

Extinguishing media which must not be used for safety reasons:

Do not use water jets

None in particular.

5.2. Special hazards arising from the substance or mixture

Avoid inhaling the fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

For emergency responders:

Safety Data Sheet

THINNER 698

- Wear personal protection equipment.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Adequately ventilated premises.
Use localized ventilation system.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Always keep the containers tightly closed.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
Adequately ventilated premises.
- 7.3. Specific end use(s)
See section 1.2

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
heptan-2-one; methyl amyl ketone - CAS: 110-43-0
EU - TWA(8h): 238 mg/m³, 50 ppm - STEL: 475 mg/m³, 100 ppm - Notes: Skin
ACGIH - TWA(8h): 50 ppm - Notes: Eye and skin irr
ethyl acetate - CAS: 141-78-6
EU - TWA(8h): 734 mg/m³, 200 ppm - STEL: 1468 mg/m³, 400 ppm
ACGIH - TWA(8h): 400 ppm - Notes: URT and eye irr
VLE1 - TWA: 200 ppm
VLE - STEL: 400 ppm
- DNEL Exposure Limit Values
N.A.
- PNEC Exposure Limit Values
N.A.
- 8.2. Exposure controls
Eye protection:

698.000/2

Page n. 4 of 11

Safety Data Sheet

THINNER 698

Use goggles/facemask certified UNI EN 166.

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Suitable protective clothing is required for complete skin protection: for example coveralls with long sleeves and trousers, rubber boots and apron, etc., according to UNI EN 14325.

Protection for hands:

Use protective gloves: waterproof rubber gloves certified UNI EN 374. Nitrile gloves provide good protection. Use care in selecting a penetration time of the gloves longer than the foreseen usage time.

Respiratory protection:

Use adequate protective respiratory equipment: a carbon filter mask with filters certified UNI EN 149 or dust masks certified UNI EN 140. Filters of types A and P types may be considered.

Thermal Hazards:

None

Environmental exposure controls:

See sections 6 and 13

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	liquid	--	--
Colour:	colourless	--	--
Odour:	N.A.	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	bp>35 °C	--	--
Flammability:	Flam. Liq. 2, H225	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	14 °C	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	N.A.	--	--
Kinematic viscosity:	> 20,5 mm ² /sec (40 °C)	--	--

698.000/2

Page n. 5 of 11

Safety Data Sheet

THINNER 698

Viscosity (23°C+0.5°C)	min 1- max 2		--
Spindle:	0	--	--
Speed (rpm):	0	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.876	UNI EN ISO 2431 (ex DIN 53211 s)	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

THINNER 698

a) acute toxicity

The product is classified: Acute Tox. 4 H302; Acute Tox. 4 H332

ATEmix - Oral 1333,33 mg/kg bw

698.000/2

Safety Data Sheet

THINNER 698

- ATEmix - Inhalation (Mist) 4 mg/l
- b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met
- c) serious eye damage/irritation
The product is classified: Eye Irrit. 2 H319
- d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
- f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
- g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
- h) STOT-single exposure
The product is classified: STOT SE 3 H336
- i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
- j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

N.A.

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

THINNER 698

Not classified for environmental hazards

Based on available data, the classification criteria are not met

12.2. Persistence and degradability

There is no data available on the preparation itself.

N.A.

12.3. Bioaccumulative potential

There is no data available on the preparation itself.

N.A.

12.4. Mobility in soil

There is no data available on the preparation itself.

Safety Data Sheet

THINNER 698

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Directives 91/156/CEE, 91/689/CEE, 94/62/CE.

EWC CODE 080111

Do not empty into drains, ground or waterways. Dispose of product residues and related containers at a collection point for hazardous or special waste or, where appropriate, through an authorized waste disposal company.

SECTION 14: Transport information



14.1. UN number or ID number

ADR-UN Number:	1263
IATA-UN Number:	1263
IMDG-UN Number:	1263

14.2. UN proper shipping name

ADR-Shipping Name:	PAINT RELATED MATERIAL
IATA-Shipping Name:	PAINT RELATED MATERIAL
IMDG-Shipping Name:	PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR-Class:	3
UN no.:	UN 1263
ADR - Hazard identification number:	33
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3
Erg-code:	3L

14.4. Packing group

ADR-Packing Group:	II
IATA-Packing group:	II
IMDG-Packing group:	II

698.000/2

Page n. 8 of 11

Safety Data Sheet THINNER 698

14.5. Environmental hazards

ADR-Environmental Pollutant:	No
IMDG-Marine pollutant:	No
IMDG-EmS:	F-E, S-E

14.6. Special precautions for user

ADR-Subsidiary hazards:	-
ADR-S.P.:	163 367 640C 650
ADR-Transport category (Tunnel restriction code):	2 (D/E)
ADR-Limited Quantities:	5 L
ADR-Excepted Quantities:	E2
IATA-Passenger Aircraft:	353
IATA-Subsidiary hazards:	-
IATA-Cargo Aircraft:	364
IATA-S.P.:	A3 A72 A192
IATA-ERG:	3L
IMDG-Subsidiary hazards:	-
IMDG-Stowage and handling:	Category B
IMDG-Segregation:	-

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Regulation (EU) n. 2020/878

Dir. 89/391/CEE and subsequent amendments (Risks related to chemical agents at work and Occupational exposure limit values). Directive 1999/13/EC and subsequent amendments (limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations). Regulation (CE) n. 1907/2006, Regulation (CE) 830/2015 and subsequent amendments (concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals - REACH). Regulation (CE) n.1272/2008 and subsequent amendments (on classification, labeling and packaging of substances and mixtures - CLP).

International Maritime Dangerous Goods Code, IATA Dangerous Goods Regulation, International Carriage of Dangerous Goods by Road (ADR).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 75

Restriction 3 is not applicable because the mixture does not fall within the restrictions mentioned in Annex XVII of EC Regulation No. 1907/2006.

Restriction 40 is not applicable because the mixture does not fall within the restrictions mentioned in Annex XVII of EC Regulation No. 1907/2006.

Restriction 75 is not applicable because the mixture does not fall within the restrictions mentioned in Annex XVII of EC Regulation No. 1907/2006.

Safety Data Sheet

THINNER 698

Where applicable, refer to the following regulatory provisions :

Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products. Regulation UE No 649/2012 concerning the export and import of dangerous chemicals. Regulation UE n. 528/2012 concerning the making available on the market and use of biocidal products.
 Directive 2012/18/EU (Seveso III)
 Regulation (EC) No. 648/2004 (detergents).
 Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products.
 Regulation (EC) No 689/2006 concerning the export and import of dangerous chemicals.
 Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1
 Product belongs to category: P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 2, H225	On basis of test data
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H332	Calculation method

698.000/2

Page n. 10 of 11

Safety Data Sheet

THINNER 698

Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.