

Safety Data Sheet

F01 FLASH-2 FILLER UV



Safety Data Sheet dated 5/12/2022, version 5

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

- 1.1. Product identifier
Mixture identification:
Trade code and name: F01 FLASH-2 FILLER UV
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
UV filling insulating base
Only for professional use.
- 1.3. Details of the supplier of the safety data sheet
Company:
Industria Chimica Reggiana I.C.R. Spa
(subject to management and coordination by sole shareholder company PPG Industries Inc.)
Via Gasparini, 7 42124 REGGIO EMILIA Italia
Tel. +39 0522/517803 Fax +39 0522/514384
Competent person responsible for the safety data sheet:
sdsre@icrsprint.it
- 1.4. Emergency telephone number
Tel. +39 0522-517803 or NHS 111 - dial 111

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)
- ⚠ Danger, Flam. Liq. 2, Highly flammable liquid and vapour.
 - ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
 - ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
 - ⚠ Warning, Skin Sens. 1A, May cause an allergic skin reaction.
 - ⚠ Danger, Repr. 1B, May damage the unborn child.
 - ⚠ Danger, STOT RE 1, Causes damage to ear through prolonged or repeated exposure via inhalation..
- Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.
- Adverse physicochemical, human health and environmental effects:
No other hazards

- 2.2. Label elements
Hazard pictograms:



Danger

Hazard statements:

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H360D May damage the unborn child.
- H372 Causes damage to ear through prolonged or repeated exposure via inhalation..
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from open flames - No smoking..
- P260 Do not breathe vapours or spray.
- P271 Use only outdoors or in a well-ventilated area.
- P280.D Wear protective gloves and clothing and eye protection.

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P308+P313 IF exposed or concerned: Get medical advice/attention.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special Provisions:

None

Contains

maleic anhydride
 styrene
 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone
 hexamethylene diacrylate: May produce an allergic reaction.
 phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide: May produce an allergic reaction.
 HEMA-phosphate: May produce an allergic reaction.

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

Restricted to professional users.

2.3. Other hazards

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:

Qty	Name	Ident. Number	Classification
$\geq 15\%$ - $< 20\%$	styrene	Index number: 601-026-00-0 CAS: 100-42-5 EC: 202-851-5 REACH No.: 01-2119457861-32	<ul style="list-style-type: none"> ⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.7/2 Repr. 2 H361d ⚠ 3.1/4/Inhal Acute Tox. 4 H332 ⚠ 3.9/1 STOT RE 1 H372 ⚠ 3.10/1 Asp. Tox. 1 H304 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.8/3 STOT SE 3 H335 4.1/C3 Aquatic Chronic 3 H412
$\geq 10\%$ - $< 12.5\%$	hexamethylene diacrylate	Index number: 607-109-00-8 CAS: 13048-33-4 EC: 235-921-9 REACH No.: 01-2119484737-22	<ul style="list-style-type: none"> ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=1. ⚠ 4.1/C2 Aquatic Chronic 2 H411 M=1.
$\geq 3\%$ - $< 5\%$	acetone	Index number: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2 REACH No.: 01-2119471330-49	<ul style="list-style-type: none"> ⚠ 2.6/2 Flam. Liq. 2 H225 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.8/3 STOT SE 3 H336 EUH066
$\geq 1\%$ - $< 3\%$	Oligoamine resin		<ul style="list-style-type: none"> ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.2/2 Skin Irrit. 2 H315
$\geq 1\%$ - $< 3\%$	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	Index number: 015-189-00-5 CAS: 162881-26-7 EC: 423-340-5	<ul style="list-style-type: none"> ⚠ 3.4.2/1A Skin Sens. 1A H317 4.1/C4 Aquatic Chronic 4 H413

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		REACH No.: 01-2119489401-38	
>= 0.25% - < 0.5%	HEMA-phosphate	CAS: 1187441-10-6 EC: 810-703-1 REACH No.: 01-2120140608-57	<p>⚠ 3.3/1 Eye Dam. 1 H318</p> <p>⚠ 3.4.2/1B Skin Sens. 1B H317</p>
>= 0.25% - < 0.5%	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	Index number: 606-047-00-9 CAS: 119313-12-1 EC: 404-360-3 REACH No.: 01-0000015394-70	<p>⚠ 3.7/1B Repr. 1B H360D</p> <p>⚠ 4.1/A1 Aquatic Acute 1 H400</p> <p>⚠ 4.1/C1 Aquatic Chronic 1 H410</p>
>= 0.1% - < 0.25%	1,1'-(p-tolylimino) dipropan-2-ol	CAS: 38668-48-3 EC: 254-075-1 REACH No.: 01-2119980937-17	<p>⚠ 3.1/2/Oral Acute Tox. 2 H300</p> <p>⚠ 3.3/2 Eye Irrit. 2 H319</p> <p>4.1/C3 Aquatic Chronic 3 H412</p>
>= 0.01% - < 0.1%	maleic anhydride	Index number: 607-096-00-9 CAS: 108-31-6 EC: 203-571-6 REACH No.: 01-2119472428-31	<p>⚠ 3.1/4/Oral Acute Tox. 4 H302</p> <p>⚠ 3.9/1 STOT RE 1 H372</p> <p>⚠ 3.2/1B Skin Corr. 1B H314</p> <p>⚠ 3.3/1 Eye Dam. 1 H318</p> <p>⚠ 3.4.1/1 Resp. Sens. 1 H334</p> <p>⚠ 3.4.2/1A Skin Sens. 1A H317</p> <p>EUH071</p> <p>Specific Concentration Limits: C >= 0,001%: Skin Sens. 1A H317</p>

SVHC, PBT, vPvB, endocrine disruptor substances:

>= 0.25% - < 0.5% 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone

REACH No.: 01-0000015394-70, Index number: 606-047-00-9, CAS: 119313-12-1, EC: 404-360-3
SVHC

This product is not classified H304 due to its high viscosity.

All component substances of this product have been registered under REACH or are exempt from REACH registration.

Substances in Section 3 not showing REACH registration codes are exempt from registration.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. If irritation persists: Get medical advice/attention.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for at least 15 minutes, then consult a medic immediately.

Protect uninjured eye.

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In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. OBTAIN MEDICAL ATTENTION.

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

See section 11 for known symptoms and effects.

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:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Do not use water jets. Water may not be effective fire fighting measure, however it can be used to cool closed

containers close to flames as to avoid bursting and exploding.

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke. Carbon oxides.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

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

Contain spillage, and then collect with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

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.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals

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in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

See Point 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

styrene - CAS: 100-42-5

EU - TWA(8h): 85 mg/m³, 20 ppm - STEL(): 170 mg/m³, 40 ppm - Notes: Pelle

ACGIH - TWA(8h): 10 ppm - STEL: 20 ppm - Notes: OTO, A3, BEI - CNS and hearing impair, URT irr, peripheral neuropathy, visual disorders

Italy - TWA(8h): 20 ppm - STEL: 200 ppm

acetone - CAS: 67-64-1

Italy - TWA(8h): 1210 mg/m³, 500 ppm

EU - TWA(8h): 1210 mg/m³, 500 ppm

ACGIH - TWA(8h): 250 ppm - STEL: 500 ppm - Notes: A4, BEI - URT and eye irr, CNS impair

maleic anhydride - CAS: 108-31-6

ACGIH - TWA(8h): 0.01 mg/m³ - Notes: (IFV), DSEN, RSEN, A4 - Resp sens

DNEL Exposure Limit Values

styrene - CAS: 100-42-5

Worker Professional: 406 mg/kg - Consumer: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 2.1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 85 mg/m³ - Consumer: 10.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 289 mg/m³ - Consumer: 174.25 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 306 mg/m³ - Consumer: 182.75 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

hexamethylene diacrylate - CAS: 13048-33-4

Worker Professional: 2.77 mg/kg - Consumer: 1.66 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: /dy

Worker Professional: 24.5 mg/m³ - Consumer: 7.24 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 2.08 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

acetone - CAS: 67-64-1

Worker Professional: 186 mg/kg - Consumer: 62 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 2420 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 1210 mg/m³ - Consumer: 200 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 62 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide - CAS: 162881-26-7

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Worker Professional: 21 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 21 mg/m³ - Consumer: 5.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 3.3 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Professional: 3.3 mg/kg - Consumer: 1.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 1.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

HEMA-phosphate - CAS: 1187441-10-6
Worker Professional: 7.05 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 1 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone - CAS: 119313-12-1
Worker Professional: 0.82 mg/m³ - Consumer: 0.15 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 0.82 mg/m³ - Consumer: 0.15 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 0.23 mg/kg - Consumer: 0.08 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 0.23 mg/kg - Consumer: 0.08 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Consumer: 0.08 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 0.08 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

1,1'-(p-tolylimino)dipropan-2-ol - CAS: 38668-48-3
Worker Industry: 2 mg/m³ - Worker Professional: 2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 0.6 mg/kg - Worker Professional: 0.6 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

styrene - CAS: 100-42-5
Target: Fresh Water - Value: 0.028 mg/l
Target: Marine water - Value: 0.028 mg/l
Target: Freshwater sediments - Value: 0.614 mg/kg
Target: Marine water sediments - Value: 0.0614 mg/kg
Target: Soil (agricultural) - Value: 0.2 mg/kg
Target: 14 - Value: 0.04 mg/l
Target: Purification plant - Value: 5 mg/l

hexamethylene diacrylate - CAS: 13048-33-4
Target: Fresh Water - Value: 0.0015 mg/l
Target: Marine water - Value: 0.00015 mg/l
Target: Freshwater sediments - Value: 0.024 mg/kg
Target: Soil - Value: 0.00397 mg/kg
Target: Purification plant - Value: 2.7 mg/l

acetone - CAS: 67-64-1
Target: Purification plant - Value: 100 mg/l
Target: Intermittent emissions - Value: 21 mg/l
Target: Freshwater sediments - Value: 30.4 mg/kg
Target: Marine water sediments - Value: 3.04 mg/kg
Target: Soil - Value: 33.3 mg/kg
Target: Fresh Water - Value: 10.6 mg/kg
Target: Marine water - Value: 1.06 mg/l

HEMA-phosphate - CAS: 1187441-10-6
Target: Fresh Water - Value: 0.65 mg/l
Target: Marine water - Value: 0.0165 mg/l
Target: Freshwater sediments - Value: 2.8 mg/kg

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Target: Marine water sediments - Value: 0.28 mg/kg
 Target: Purification plant - Value: 0.4 mg/kg
 Target: Soil - Value: 0.46 mg/kg
 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone - CAS: 119313-12-1
 Target: Fresh Water - Value: 0.00046 mg/l
 Target: Marine water - Value: 0.000046 mg/kg
 Target: Intermittent emissions - Value: 0.0046 mg/l
 Target: Purification plant - Value: 0.59 mg/l
 Target: Freshwater sediments - Value: 0.0458 mg/kg
 Target: Marine water sediments - Value: 0.00458 mg/kg
 Target: Sediment - Value: 0.0219 mg/kg
 1,1'-(p-tolylimino)dipropan-2-ol - CAS: 38668-48-3
 Target: Microorganisms in sewage treatments - Value: 199.5 mg/l
 Target: Marine water - Value: 0.00782 mg/kg
 Target: Fresh Water - Value: 0.017 mg/l

Biological Exposure Index

styrene - CAS: 100-42-5
 Value: 400 mg/g creatinine - medium: Urine - Biological Indicator: Mandelic acid in urine and fenilgliossilico - Sampling Period: End of turn
 Value: 40 mg/l creatinine - medium: Urine - Biological Indicator: Styrene in urine - Sampling Period: End of turn

acetone - CAS: 67-64-1
 Value: 50 mg/L - medium: Urine - Biological Indicator: Acetone in urine - Sampling Period: End of turn

8.2. Exposure controls

Eye protection:
 Use close fitting safety goggles and/or visor conforming to BS 2092 GRADE 1).

Protection for skin:
 Wear safety clothing that ensure full skin protection in accordance to EN 14605 Type 4 in case of spills or spray (e.g. Tyrek). Please note: safety clothing must be changed immediately if it comes in contact with product.

Protection for hands:
 Use protective gloves that provides comprehensive protection, EN374 Class 3 (B-F-I).
 Permeation time > 60 minutes; 0.4 mm thickness.

Respiratory protection:
 Use adequate protective respiratory devices, using Filter "A" (Brown colour) for organic gas and vapors with boiling points over 65°C.

Thermal Hazards:
 None

Environmental exposure controls:
 Emissions from ventilation systems or from work processes must be check as to ensure compliance to environmental protection legislation. In some cases the addition of vapour scrubbers, filters or other system modification may be necessary in order to reduce emissions to acceptable levels.

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:	N.A.	--	--
Odour:	Typical	--	--
Odour threshold:	N.D.	--	--

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Melting point/freezing point:	N.D.	--	--
Boiling point or initial boiling point and boiling range:	56°C	--	--
Flammability:	Flam. Liq. 2, H225	--	--
Lower and upper explosion limit:	2,5 - 14,3 % vol	--	--
Flash point:	-18 °C	--	--
Auto-ignition temperature:	465°C	--	--
Decomposition temperature:	N.D.	--	--
pH:	N.A.	--	--
Kinematic viscosity:	> 20,5 mm ² /sec (40 °C)	--	--
Solubility in water:	Insoluble	--	--
Solubility in oil:	N.D.	--	--
Partition coefficient n-octanol/water (log value):		--	--
Vapour pressure:	240 hPa	--	--
Density and/or relative density:	1.360 g/cm ³	--	--
Relative vapour density:	3,6	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	N.D.	--	--
Evaporation rate:	N.D.	--	--
Viscosity:	> 20.5 mm ² /s (40°C)	--	--
Oxidizing properties:	N.D.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

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ICR spa

Via M. Gasparini, 7

42124 REGGIO EMILIA ITALY

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Stable under normal conditions

10.2. Chemical stability

Stable under recommended use and storage conditions (see point 7).

10.3. Possibility of hazardous reactions

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid accumulating electrostatic charge.

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:

N.A.

Toxicological information of the main substances found in the product:

styrene - CAS: 100-42-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 11.8 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: OECD 402

i) STOT-repeated exposure:

Test: LOAEL(C) - Route: Oral - Species: Rat = 2000 mg/kg - Notes: bw/day

Test: NOAEL(C) - Route: Oral - Species: Rat = 1000 mg/kg - Notes: bw/day

Test: LOAEL(C) - Route: Inhalation - Species: Rat = 0.21 mg/l

hexamethylene diacrylate - CAS: 13048-33-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 3650 mg/kg

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: GUINEA PIG Positive

acetone - CAS: 67-64-1

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 21.09 ppm - Duration: 8h

Test: LD50 - Route: Oral - Species: Rat = 5800 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 20 ml/kg

b) skin corrosion/irritation:

Test: Eye Irritant Positive

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide - CAS: 162881-26-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: GUINEA PIG Positive

HEMA-phosphate - CAS: 1187441-10-6

a) acute toxicity:

Test: LC50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Skin - Species: Rabbit > 2000 mg/kg

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Rat Positive

2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone - CAS: 119313-12-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

g) reproductive toxicity:

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- Test: NOAEL(Fetal development) Positive
1,1'-(p-tolyimino)dipropan-2-ol - CAS: 38668-48-3
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 25 mg/kg
Test: LD50 - Route: Skin - Species: GUINEA PIG > 2000 mg/kg
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive
- c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Positive
- maleic anhydride - CAS: 108-31-6
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1090 mg/kg bw
Test: LD50 - Route: Skin - Species: Rabbit = 2620 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 4.35 mg/l - Duration: 1h
- styrene - CAS: 100-42-5

Acute inhalation toxicity at 1000 ppm affects the central nervous system with headaches, dizziness and coordination difficulties; irritation of the mucous membranes of the eyes and respiratory tract occurs at 500 ppm. Chronic exposure gives system depression central and peripheral nervous system with memory loss, headaches and somnolence starting from 20 ppm; digestive disorders with nausea e loss of appetite; respiratory tract irritation with chronic bronchitis; dermatosis. Repeated exposure, to low doses of the substance by inhalation, it causes irreversible changes in hearing function and can cause changes in color vision. Repeated skin exposures cause irritation. The substance degrades the skin, which can cause dryness and cracking.

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

- a) acute toxicity;
 - b) skin corrosion/irritation;
 - c) serious eye damage/irritation;
 - d) respiratory or skin sensitisation;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.
- 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.

styrene - CAS: 100-42-5

a) Aquatic acute toxicity:

- Endpoint: LC50 - Species: Fish = 4.02 mg/l - Duration h: 96
- Endpoint: EC50 - Species: Algae = 4.9 mg/l - Duration h: 72
- Endpoint: EC50 - Species: Daphnia = 4.7 mg/kg - Duration h: 48
- Endpoint: EC10 - Species: Algae = 0.28 mg/l - Duration h: 96

b) Aquatic chronic toxicity:

- Endpoint: NOEC - Species: Daphnia = 1.01 mg/l - Duration h: 504

hexamethylene diacrylate - CAS: 13048-33-4

a) Aquatic acute toxicity:

- Endpoint: EC50 - Species: Algae = 1.5 mg/l - Duration h: 72
- Endpoint: NOEC - Species: Algae = 0.5 mg/l - Duration h: 72
- Endpoint: EC50 - Species: Fish = 4.6 mg/l - Duration h: 96
- Endpoint: EC50 - Species: Daphnia = 2.6 mg/l - Duration h: 48

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acetone - CAS: 67-64-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 8120 mg/l - Duration h: 96

Endpoint: EC50 - Species: Algae = 530 mg/l - Duration h: 192

Endpoint: EC50 - Species: Daphnia = 8800 mg/l - Duration h: 48

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide - CAS: 162881-26-7

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 1.175 mg/l - Duration h: 48 - Notes: Nessun effetto tossico a concentrazioni prossime alla solubilità in acqua.

Endpoint: EC50 - Species: Algae = 0.260 mg/l - Duration h: 72 - Notes: Nessun effetto tossico a concentrazioni prossime alla solubilità in acqua.

Endpoint: LC50 - Species: Fish = 0.09 mg/l - Duration h: 96 - Notes: Nessun effetto tossico a concentrazioni prossime alla solubilità in acqua.

HEMA-phosphate - CAS: 1187441-10-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48

2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone - CAS: 119313-12-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.46 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 0.8 mg/l - Duration h: 24

Endpoint: EC50 - Species: Algae > 0.5 mg/l - Duration h: 72

maleic anhydride - CAS: 108-31-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 75 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 42.81 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 74.35 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 10 mg/l - Duration h: 504

12.2. Persistence and degradability

Non-readily biodegradable

12.3. Bioaccumulative potential

Not bioaccumulative

12.4. Mobility in soil

Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a significant amount may penetrate and pollute water table.

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

The empty containers must be considered special waste materials to take to dump of type 2B. If previously cleansed, they can be admitted in first class dumps.

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. DO NOT discharge into sewers, watercourses, ponds, canals or ditches. Empty product containers must be completely drained and stored safely until appropriately processed or disposed. Empty containers must be recycled, recovered or disposed of by a qualified and authorized company operating in compliance with current recycling, recovery and disposal regulations. It is advisable to provide the disposal company with all safety information of the material contained in the empty packaging. DO NOT pressurize, DO NOT cut, DO NOT weld, DO NOT puncture, DO NOT crush, DO NOT expose empty containers to heat, flames, sparks, electrostatic discharge

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or other sources of ignition.

SECTION 14: Transport information



Limited quantities, not subject to ADR norms for internal packaging of up to 5 litres and maximum packaging of 30kg.

- 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 |
| IATA-Shipping Name: | PAINT |
| IMDG-Shipping Name: | PAINT |
- 14.3. Transport hazard class(es)
- | | |
|-------------------------------------|-----|
| ADR-Class: | 3 |
| ADR-Label: | 3 |
| ADR - Hazard identification number: | 33 |
| IATA-Class: | 3 |
| IATA-Label: | 3 |
| IMDG-Class: | 3 |
| IMDG-Class: | 3.2 |
- 14.4. Packing group
- | | |
|---------------------|----|
| ADR-Packing Group: | II |
| IATA-Packing group: | II |
| IMDG-Packing group: | II |
- 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) |
| IATA-Passenger Aircraft: | 353 |
| IATA-Subsidiary hazards: | - |
| IATA-Cargo Aircraft: | 364 |
| IATA-S.P.: | A3 A72 A19 |
| IATA-ERG: | 3L |
| IMDG-Page: | 3268 |
| IMDG-Subsidiary hazards: | - |
| IMDG-MFAG: | 310 |
| 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
- Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)

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Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)

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 30

Restriction 75

Volatile Organic compounds - VOCs =258.00 g/Kg= 350.88 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.21

Dry weight (% wt):74.2

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone

Toxic to reproduction

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

Full text of phrases referred to in Section 3:

H360D May damage the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H226 Flammable liquid and vapour.

H361d Suspected of damaging the unborn child.

H332 Harmful if inhaled.

H372 Causes damage to ear through prolonged or repeated exposure via inhalation..

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

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H315 Causes skin irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.
H413 May cause long lasting harmful effects to aquatic life.
H318 Causes serious eye damage.
H300 Fatal if swallowed.
H302 Harmful if swallowed.
H372 Causes damage to organs (Respiratory system) through prolonged or repeated exposure if inhaled.
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
EUH071 Corrosive to the respiratory tract.

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. 2	3.1/2/Oral	Acute toxicity (oral), Category 2
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Resp. Sens. 1	3.4.1/1	Respiratory Sensitisation, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1

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Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3
Aquatic Chronic 4	4.1/C4	Chronic (long term) aquatic hazard, category 4

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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1A, H317	Calculation method
Repr. 1B, H360D	Calculation method
STOT RE 1, H372	Calculation method
Aquatic Chronic 3, H412	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.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
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.

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N.A.: Not available
N.D.: Not determined.
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