

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : F-88 Liquid
Product code : DSI-003
Type of product : Monomer
Product group : Blend

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Industrial use, Professional use
Industrial/Professional use spec : For professional use only
Industrial

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

AMCO INTERNATIONAL
2 Union Hill Road
19428 West Conshohocken - UNITED STATES
T 610-825-1524
msds@amcoint.com

1.4. Emergency telephone number

Emergency number : Infotrac (800) 535-5053 Outside USA Tel : +1 352 323 3500

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Skin Sens. 1 H317
Repr. 1B H360
STOT SE 3 H335

Full text of H-phrases: see section 16

2.2. Label elements**Labeling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

Methyl methacrylate, Dibutyl phthalate

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H335 - May cause respiratory irritation
H360 - May damage fertility or the unborn child

Precautionary statements (CLP) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof ventilating, lighting, electrical equipment

F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Highly flammable liquid and vapor. May damage fertility or the unborn child. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction.

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methyl methacrylate	(CAS No) 80-62-6 (EC no) 201-297-1 (EC index no) 607-035-00-6	<= 90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
Dibutyl phthalate substance listed as REACH Candidate (Dibutyl phthalate (DBP)) substance listed in REACH Annex XIV (Dibutyl phthalate (DBP))	(CAS No) 84-74-2 (EC no) 201-557-4 (EC index no) 607-318-00-4	5 - 10	Repr. 1B, H360D Aquatic Acute 1, H400
Dimethyltolylamine	(CAS No) 99-97-8 (EC no) 202-805-4 (EC index no) 612-056-00-9	1 - 3	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.

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. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing vapors, mist, fume, spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : No data available

Odor : No data available

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Not applicable

Vapor pressure : >=

Relative vapor density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Log Pow	: No data available
Viscosity, kinematic	: <=
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
(84-74-2)	This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII

12.6. Other adverse effects

No additional information available

F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1993
UN-No. (IATA) : 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IATA) : Not applicable
Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II, (D/E)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Hazard labels (ADR) : 3



IATA

Transport hazard class(es) (IATA) : 3

14.4. Packing group

Packing group (ADR) : II
Packing group (IATA) : Not applicable

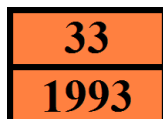
14.5. Environmental hazards

Dangerous for the environment : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Special provision (ADR) : 274, 601, 640D
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP1, TP8, TP28
Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates :



F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Tunnel restriction code (ADR) : D/E
EAC : •3YE

- Air transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains substance on the candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Dibutyl phthalate (DBP) (EC 201-557-4, CAS 84-74-2)

Contains REACH Annex XIV substances:

Substance name	Authorisation number	Sunset date	REACH authorisation exemptions
Dibutyl phthalate (DBP) (EC 201-557-4, CAS 84-74-2)		21/01/2015	

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : Dibutyl phthalate is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : Dibutyl phthalate is listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Flam. Liq. 2	Flammable liquids Category 2
Repr. 1B	Reproductive toxicity Category 1B
Repr. 1B	Reproductive toxicity Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed

F-88 Liquid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H360D	May damage the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

SDS EU (REACH Annex II)

For EU Regulatory Inquiries, please contact:

Biorius
Rue de la Croeyere 10A
BE-7170 MANAGE
Tel: 32 2 888 40 10

Disclaimer: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.