

Safety Data Sheet

Copyright, 2022, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group: 23-3337-5 **Version number:** 1.02

Revision date: 21/11/2022 **Supersedes date:** 24/01/2020

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3MTM UV-Curable Adhesive LC-3200

Product Identification Numbers

JS-5000-0006-7

7000008167

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

Identified uses

Adhesive

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.

Telephone: +353 1 280 3555 E Mail: tox.uk@mmm.com Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

3MTM UV-Curable Adhesive LC-3200

Skin Sensitization, Category 1 - Skin Sens. 1; H317 Reproductive Toxicity, Category 1B - Repr. 1B; H360D Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400 Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

2.2. Label elements CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |









Ingredients:

| Ingredient | CAS Nbr | EC No. | % by Wt |
|---|-------------|-----------|---------|
| hexamethylene diacrylate | 13048-33-4 | 235-921-9 | 25 - 55 |
| 2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone | 119313-12-1 | 404-360-3 | 1 - 10 |

HAZARD STATEMENTS:

Causes skin irritation. H315 H319 Causes serious eve irritation. May cause an allergic skin reaction. H317 May damage the unborn child. H360D

H400 Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects. H411

PRECAUTIONARY STATEMENTS

Prevention:

P201 Obtain special instructions before use. P273 Avoid release to the environment. P280E Wear protective gloves.

Response:

P308 + P313IF exposed or concerned: Get medical advice/attention. P333 + P313If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:

Restricted to professional users.

70% of the mixture consists of components of unknown acute oral toxicity.

Contains 70% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|---------|--|
| Acrylate oligomer | Trade Secret | 45 - 75 | Substance not classified as hazardous |
| hexamethylene diacrylate | (CAS-No.) 13048-33-4 (EC-No.) 235-921-9 (REACH-No.) 01- 2119484737-22 | 25 - 55 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Nota D Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411 |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | (CAS-No.) 119313-12-1 (EC-No.) 404-360-3 | 1 - 10 | Repr. 1B, H360D Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 |

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

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

The most important symptoms and effects based on the CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering,

and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide Carbon dioxide. Irritant vapours or gases.

Condition

During combustion. During combustion. During combustion.

5.3. Advice for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect vented goggles.

Applicable Norms/Standards
Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards
Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquid.Specific Physical Form:Viscous.ColourLight YellowOdorAcrylate

Odour thresholdNo data available.Melting point/freezing pointNot applicable.Boiling point/boiling range>=151 °CFlammability (solid, gas)Not applicable.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.

Flash point 151 °C [Test Method: Closed Cup]

Autoignition temperatureNo data available.Decomposition temperatureNo data available.

pH substance/mixture is non-soluble (in water)

Kinematic Viscosity 3,398 mm²/sec Water solubility <=0.1 %

Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Vapour pressureNo data available.

Density 1.03 g/ml

Relative density 1.03 [*Ref Std:* WATER=1]

Relative Vapour DensityNot applicable.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNot applicable.Molecular weightNo data available.

Percent volatile 0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

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

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Dermal effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|-----------------|--------|---------|---|
| Overall product | Dermal | | No data available; calculated ATE >2,000 - =5,000 |
| | | | mg/kg |

| Overall product | Inhalation- Vapour(4 hr) | | No data available; calculated ATE >50 mg/l |
|---|--------------------------------|--------|--|
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| hexamethylene diacrylate | Dermal | Rabbit | LD50 3,636 mg/kg |
| hexamethylene diacrylate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | Ingestion | Rat | LD50 > 5,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | | Value |
|---|--------|---------------------------|
| | | |
| hexamethylene diacrylate | Rabbit | Irritant |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| hexamethylene diacrylate | Rabbit | Moderate irritant |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | Rabbit | No significant irritation |

Skin Sensitisation

| Name | Species | Value |
|---|---------|----------------|
| | | |
| hexamethylene diacrylate | Guinea | Sensitising |
| | pig | |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | Guinea | Not classified |
| | pig | |

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| hexamethylene diacrylate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | In Vitro | Not mutagenic |
| 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--------------------------|--------|---------|------------------|
| hexamethylene diacrylate | Dermal | Mouse | Not carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|----------------|--|---------|------------------------|----------------------|
| hexamethylene diacrylate | Not specified. | Not classified for development | Rat | NOAEL 750 mg/kg/day | during organogenesis |
| 2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone | Ingestion | Not classified for female reproduction | Rat | NOAEL 300 mg/kg/day | 1 generation |
| 2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone | Ingestion | Not classified for male reproduction | Rat | NOAEL 300 mg/kg/day | 1 generation |
| 2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone | Ingestion | Toxic to development | Rat | NOAEL 30 mg/kg/day | 1 generation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--------------------------|------------|------------------------|---|---------|------------------------|----------------------|
| hexamethylene diacrylate | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for | Human | NOAEL Not available | |
| | | | classification | | | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|-----------|---|--|---------|------------------------|----------------------|
| hexamethylene diacrylate | Dermal | skin | May cause damage to organs though prolonged or repeated exposure | Mouse | LOAEL 70 mg/kg/day | 80 weeks |
| 2-benzyl-2- dimethylamino-4'- morpholinobutyrophenone | Ingestion | endocrine system hematopoietic system liver kidney and/or bladder | Not classified | Rat | NOAEL 500 mg/kg/day | 28 days |

Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS# | Organism | Type | Exposure | Test endpoint | Test result |
|---|-------------|------------------|--------------|------------|---------------|-------------|
| hexamethylene diacrylate | 13048-33-4 | Green algae | Experimental | 72 hours | EC50 | 2.33 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Medaka | Experimental | 96 hours | LC50 | 0.38 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Water flea | Experimental | 48 hours | EC50 | 2.7 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Green algae | Experimental | 72 hours | NOEC | 0.9 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Medaka | Experimental | 39 days | NOEC | 0.072 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Water flea | Experimental | 21 days | NOEC | 0.14 mg/l |
| hexamethylene diacrylate | 13048-33-4 | Activated sludge | Experimental | 30 minutes | EC50 | 270 mg/l |
| 2-benzyl-2- dimethylamino-4'- morpholinobutyrophen one | 119313-12-1 | Activated sludge | Experimental | 30 minutes | IC50 | >5.9 mg/l |

Page: 9 of 14

| 2-benzyl-2- dimethylamino-4'- | 119313-12-1 | Green algae | Experimental | 72 hours | EbC50 | >0.5 mg/l |
|---|-------------|-------------|--------------|----------|-------|-----------|
| morpholinobutyrophen | | | | | | |
| one | | | | | | |
| 2-benzyl-2- dimethylamino-4'- morpholinobutyrophen one | 119313-12-1 | Zebra Fish | Experimental | 96 hours | LC50 | 0.46 mg/l |
| 2-benzyl-2- dimethylamino-4'- morpholinobutyrophen one | 119313-12-1 | Green algae | Experimental | 72 hours | NOEC | 0.5 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|-------------|--------------------------------|----------|-------------------------------|---|--------------------------------|
| hexamethylene diacrylate | 13048-33-4 | Experimental Biodegradation | 28 days | | 60-70 %CO2 evolution/THC O2 evolution | ISO 14593 Inorg C Headspace |
| hexamethylene diacrylate | 13048-33-4 | Estimated Photolysis | | Photolytic half-life (in air) | 1 days (t 1/2) | Episuite TM |
| 2-benzyl-2-dimethylamino- 4'- morpholinobutyrophenone | 119313-12-1 | Experimental Biodegradation | 28 days | Carbon Deplet | 3 %CO2 evolution/THC O2 evolution | similar to OECD 301B |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|---------|-------------------------------|----------|------------|-------------|------------------------------|
| hexamethylene diacrylate | | Experimental Bioconcentration | | Log Kow | 2.81 | |
| 2-benzyl-2-dimethylamino- 4'- morpholinobutyrophenone | | Experimental Bioconcentration | | Log Kow | 2.91 | EC A.8 Partition Coefficient |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|---|------------|----------------------------------|------------|-------------|-----------------------------------|
| hexamethylene diacrylate | 13048-33-4 | Estimated Mobility in Soil | Koc | 220 l/kg | Episuite TM |
| 2-benzyl-2-dimethylamino- 4'- morpholinobutyrophenone | | Experimental Mobility in Soil | Koc | , , | OECD 121 Estim. of Koc by HPLC |

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste

incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|---|--|--|--|
| 14.1 UN number or ID number | UN3082 | UN3082 | UN3082 |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(1-BUTANONE, 2- (DIMETHYLAMINO)-1-[4- (4- MORPHOLINYL)PHENYL] -2-(PHENYLMETHYL)-) | | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(1-BUTANONE, 2- (DIMETHYLAMINO)-1-[4- (4- MORPHOLINYL)PHENYL] -2-(PHENYLMETHYL)-) |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | Environmentally Hazardous | Not applicable | Marine Pollutant |
| 14.6 Special precautions for user 14.7 Marine Transport in | Please refer to the other sections of the SDS for further information. No data available. | Please refer to the other sections of the SDS for further information. No data available. | Please refer to the other sections of the SDS for further information. No data available. |
| bulk according to IMO instruments | | | |
| Control Temperature | No data available. | No data available. | No data available. |
| Emergency Temperature | No data available. | No data available. | No data available. |

| ADR Classification Code | M6 | Not applicable. | Not applicable. |
|-------------------------|-----------------|-----------------|-----------------|
| IMDC Sogragation Code | Not applicable | Not applicable | NONE |
| IMDG Segregation Code | Not applicable. | Not applicable. | NONE |
| | | | |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Authorization status under REACH:

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

IngredientCAS Nbr2-benzyl-2-dimethylamino-4'-119313-12-

morpholinobutyrophenone

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories | Qualifying quantity (tonnes) for the application of | | |
|---|---|-------------------------|--|
| | Lower-tier requirements | Upper-tier requirements | |
| E2 Hazardous to the Aquatic environment | 200 | 500 | |

Seveso named dangerous substances, Annex 1, Part 2

| Dangerous Substances | Identifier(s) | Qualifying quantity (tonnes) for the application of | |
|------------------------------|---------------|---|-------------------------|
| | | Lower-tier requirements | Upper-tier requirements |
| 2-benzyl-2-dimethylamino-4'- | 119313-12-1 | 100 | 200 |
| morpholinobutyrophenone | | | |

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

| SECTION 16: Other information |
|--------------------------------------|
|--------------------------------------|

List of relevant H statements

| H315 | Causes skin irritation. |
|-------|--|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H360D | May damage the unborn child. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting |

H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Revision information:

EU Section 09: pH information information was added.

Section 1: Emergency telephone information was modified.

Section 1: Product name information was modified.

CLP: Ingredient table information was modified.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Precautionary - Disposal information was deleted.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was modified.

Label: CLP Supplemental Precautionary Statements information was deleted.

Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was added.

Section 03: Composition table % Column heading information was added.

Section 3: Composition/Information of ingredients table information was modified.

Section 03: Substance not applicable information was added.

Section 04: First Aid - Symptoms and Effects (CLP) information was added.

Section 04: Information on toxicological effects information was modified.

Section 5: Hazardous combustion products table information was modified.

Section 8: Appropriate Engineering controls information information was modified.

Section 8: glove data value information was deleted.

Section 8: glove data value information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 8: Skin protection - protective clothing information information was modified.

Section 9: Evaporation Rate information information was deleted.

Section 9: Explosive properties information information was deleted.

Section 09: Kinematic Viscosity information information was added.

Section 9: Melting point information information was modified.

Section 9: Oxidising properties information information was deleted.

Section 9: pH information information was deleted.

Section 9: Property description for optional properties information was modified.

Section 9: Specific physical form information information was added.

Section 9: Vapour density value information was added.

Section 9: Vapour density value information was deleted.

Section 9: Viscosity information information was deleted.

Section 11: Acute Toxicity table information was modified.

Section 11: Classification disclaimer information was modified.

Section 11: No endocrine disruptor information available warning information was added.

Section 11: Reproductive Hazards information information was deleted.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Reproductive/developmental effects information information was added.

Section 11: Target Organs - Repeated Table information was added.

Section 11: Target Organs - Repeated Table information was deleted.

Section 12: 12.6. Endocrine Disrupting Properties information was added.

Section 12: 12.7. Other adverse effects information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Contact manufacturer for more detail, information was deleted.

Page: 13 of 14

- Section 12: Mobility in soil information information was added.
- Section 12: No endocrine disruptor information available warning information was added.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 14 Classification Code Main Heading information was added.
- Section 14 Classification Code Regulation Data information was added.
- Section 14 Control Temperature Main Heading information was added.
- Section 14 Control Temperature Regulation Data information was added.
- Section 14 Disclaimer Information information was added.
- Section 14 Emergency Temperature Main Heading information was added.
- Section 14 Emergency Temperature Regulation Data information was added.
- Section 14 Hazard Class + Sub Risk Main Heading information was added.
- Section 14 Hazard Class + Sub Risk Regulation Data information was added.
- Section 14 Hazardous/Not Hazardous for Transportation information was added.
- Section 14 Other Dangerous Goods Main Heading information was added.
- Section 14 Other Dangerous Goods Regulation Data information was added.
- Section 14 Packing Group Main Heading information was added.
- Section 14 Packing Group Regulation Data information was added.
- Section 14 Proper Shipping Name information was added.
- Section 14 Regulations Main Headings information was added.
- Section 14 Segregation Regulation Data information was added.
- Section 14 Segregation Code Main Heading information was added.
- Section 14 Special Precautions Main Heading information was added.
- Section 14 Special Precautions Regulation Data information was added.
- Section 14 Transport in bulk Regulation Data information was added.
- Section 14 Marine transport in bulk according to IMO instruments Main Heading information was added.
- Section 14 UN Number Column data information was added.
- Section 14 UN Number information was added.
- Section 15: Authorization status under REACH: SVHC Authorization ingredient information information was added.
- Section 15: Regulations Inventories information was added.
- Section 15: Seveso Hazard Category Text information was added.
- Section 15: Seveso Substance Text information was added.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

Section 2: No PBT/vPvB information available warning information was added.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M Ireland MSDSs are available at www.3M.com