

# SAFETY DATA SHEET

UNIMOLY HTC METALLIC Spray

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

**Product name** : UNIMOLY HTC METALLIC Spray  
**Product code** : 081047  
**Product description** : Lubricant spray

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

Not applicable.

**1.3 Details of the supplier of the safety data sheet**

KLÜBER LUBRICATION MÜNCHEN KG  
 Geisenhausenerstrasse 7  
 D-81379 München  
 Tel: +49 (0) 897876-0  
 Fax: +49 (0) 897876-333

**e-mail address of person responsible for this SDS** : Material Compliance Management E-Mail: mcm@klueber.com

**National contact****1.4 Emergency telephone number****Supplier**

**Emergency telephone number (with hours of operation)** : 0049 (0) 897876-700 (24hrs)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Flam. Aerosol 1, H222  
 Skin Irrit. 2, H315  
 STOT SE 3, H336  
 Asp. Tox. 1, H304  
 Aquatic Acute 1, H400  
 Aquatic Chronic 2, H411

**Ingredients of unknown toxicity** :  Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 11.6%

**Ingredients of unknown ecotoxicity** :  Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 64%

**Classification according to Directive 1999/45/EC [DPD]**

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : +; R12  
 Xi; R38  
 R67  
 N; R50/53

**Physical/chemical hazards** : Extremely flammable.

**Human health hazards** : Irritating to skin. Vapours may cause drowsiness and dizziness.

**Environmental hazards** :  Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**SECTION 2: Hazards identification**

**2.2 Label elements**

**Hazard pictograms** : 

**Signal word** : **Danger**

**Hazard statements** : **H228** Extremely flammable aerosol.  
**H312** Causes skin irritation.  
**H302** May be fatal if swallowed and enters airways.  
**H332** May cause drowsiness or dizziness.  
**H410** Very toxic to aquatic life.  
**H411** Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : **P201** Wear protective gloves. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Avoid release to the environment.

**Response** : **P301+P311** INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. **P302+P352** IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**Storage** : **P202** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**Disposal** : Not applicable.

**Hazardous ingredients** : Naphtha (petroleum), hydrotreated light

**Supplemental label elements** : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

**2.3 Other hazards**

**Other hazards which do not result in classification** : Not available.

**Additional warning phrases** : Not available.

**SECTION 3: Composition/information on ingredients**

**Substance/mixture** : Mixture

**Description** : **H314** Active agent with propellant and solvent.

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Butane	EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	35-50	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
Naphtha (petroleum), hydrotreated light	CAS: 64742-49-0	25-35	F; R11 Xn; R65 Xi; R38 R67 N; R51/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336i Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
Zinc	EC: 231-175-3 CAS: 7440-66-6	0.25-2.5	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1,	[1]

**UNIMOLY HTC METALLIC Spray****SECTION 3: Composition/information on ingredients**

copper	EC: 231-159-6 CAS: 7440-50-8	<25	N; R50	H410 Aquatic Acute 1, H400	[1]
Amines, N-tallow alkyltrimethylenedi-, oleates	EC: 263-186-4 CAS: 61791-53-5	<1	C; R34 N; R50  <b>See Section 16 for the full text of the R- phrases declared above.</b>	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** :  Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**4.2 Most important symptoms and effects, both acute and delayed****Potential acute health effects**

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** :  Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

**SECTION 4: First aid measures****Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**5.2 Special hazards arising from the substance or mixture**

- Hazards from the substance or mixture** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

**5.3 Advice for firefighters**

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- For non-emergency personnel** :  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**6.3 Methods and materials for containment and cleaning up**

- Small spill** :  Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** :  Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

- Protective measures** :  Put on appropriate personal protective equipment (see Section 8). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- 7.2 Conditions for safe storage, including any incompatibilities** :  Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## SECTION 7: Handling and storage

### 7.3 Specific end use(s)

- Recommendations** : Not available.  
**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
butane	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 1810 mg/m <sup>3</sup> 15 minute(s). STEL: 750 ppm 15 minute(s). TWA: 1450 mg/m <sup>3</sup> 8 hour(s). TWA: 600 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

#### Derived effect levels

No DELs available.

#### Predicted effect concentrations

No PECs available.

### 8.2 Exposure controls

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**UNIMOLY HTC METALLIC Spray****SECTION 8: Exposure controls/personal protection**

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

**Physical state** : Aerosol.  
**Colour** : Colourless.  
**Odour** : Characteristic.  
**pH** : Not available.  
**Melting point/freezing point** : Not available.  
**Initial boiling point and boiling range** : 35°C  
**Flash point** : Closed cup: -80°C  
**Flammability (solid, gas)** : Not available.  
**Burning time** : Not applicable.  
**Burning rate** : Not applicable.  
**Upper/lower flammability or explosive limits** : Lower: 1.8%  
Upper: 11.2%  
**Vapour pressure** : >120 kPa [20°C]  
**Density** : 0.6 g/cm<sup>3</sup> [20°C]  
**Bulk Density** : Not available.  
**Solubility(ies)** : Insoluble in the following materials: cold water and hot water.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : >350°C  
**Decomposition temperature** : Not available.  
**Viscosity** : Not available.  
**Explosive properties** : Not available.  
**Oxidising properties** : Not available.  
**Comments** : Values refer to the propellant

**9.2 Other information**

**Type of aerosol** : Spray

No additional information.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**10.5 Incompatible materials** : No specific data.

**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**

Product/ingredient name	Result	Species	Dose	Exposure
Butane Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Vapour LD50 Dermal	Rat Rabbit	658000 mg/m <sup>3</sup> >5000 mg/kg	4 hours -
Isobutane	LD50 Oral LC50 Inhalation Vapour	Rat Rat	>15000 mg/kg 658000 mg/m <sup>3</sup>	- 4 hours

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

Not available.

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc	Skin - Mild irritant	Human	-	-	-

**Conclusion/Summary** : Not available.

**Sensitiser**

**Conclusion/Summary** : Not available.

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

**Conclusion/Summary** : Not available.

**Teratogenicity**

**Conclusion/Summary** : Not available.

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrotreated light	Category 3	Inhalation	Narcotic effects

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Product/ingredient name	Result
Naphtha (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
- Skin contact** : Causes skin irritation.
- Eye contact** : Causes serious eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics**

**SECTION 11: Toxicological information**

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

**Long term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

- Conclusion/Summary** : Not available.
- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Other information** : Not available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
Copper	Acute EC50 4.1 ug/L Fresh water	Crustaceans - Simocephalus vetulus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
	Acute EC50 1 ug/L Fresh water	Daphnia - Ceriodaphnia dubia - Juvenile (Fledgling, Hatchling, Weanling) - <24 hours	48 hours
	Acute LC50 9.4 ug/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - <1 months	96 hours
	Chronic NOEC 7.43 ug/L Fresh water	Fish - Salmo trutta - IMMATURE - 14 cm - 26.3 g	4 days

- Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

- Conclusion/Summary** : Not available.

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**SECTION 12: Ecological information**

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
butane	2.89	-	low
Isobutane	2.8	-	low
propane	2.36	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods**

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.







**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	1950	1950	1950
<b>14.2 UN proper shipping name</b>	AEROSOLS	AEROSOLS. Marine pollutant	Aerosols, flammable
<b>14.3 Transport hazard class(es)</b>	2  	2.1  	2.1  
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.

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**SECTION 14: Transport information**

<b>14.6 Special precautions for user</b>	Not available.	Not available.	Not available.
<b>Additional information</b>	<b>Limited quantity</b> LQ2  <b>Tunnel code</b> D	<b>Emergency schedules (EmS)</b> F-D, S-U	-

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Other EU regulations**

**Europe inventory** : Not determined.

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Listed

**Integrated pollution prevention and control list (IPPC) - Air** : Listed

**Integrated pollution prevention and control list (IPPC) - Water** : Listed

**Aerosol dispensers** :

**3**



**Extremely flammable**

Product/ingredient name	List name	Name on list	Classification	Notes
butane	UK Occupational Exposure Limits EH40 - WEL	butane	Carc.	-

**International regulations**

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**UNIMOLY HTC METALLIC Spray**

**SECTION 15: Regulatory information**

Chemical Weapons : Not listed  
 Convention List Schedule II  
 Chemicals

Chemical Weapons : Not listed  
 Convention List Schedule III  
 Chemicals

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Classification	Justification
✔ Flam. Aerosol 1, H222 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment

**Full text of abbreviated H statements** : ✔ H220 Extremely flammable gas.  
 H222 Extremely flammable aerosol.  
 H225 Highly flammable liquid and vapour.  
 H280 Contains gas under pressure; may explode if heated.  
 H304 May be fatal if swallowed and enters airways.  
 H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H336 May cause drowsiness or dizziness.  
 H336i May cause drowsiness or dizziness.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]** : ✔ Aquatic Acute 1, H400 AQUATIC TOXICITY (ACUTE) - Category 1  
 Aquatic Chronic 1, H410 AQUATIC TOXICITY (CHRONIC) - Category 1  
 Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2  
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Flam. Aerosol 1, H222 FLAMMABLE AEROSOLS - Category 1  
 Flam. Gas 1, H220 FLAMMABLE GASES - Category 1  
 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2  
 Press. Gas Comp. Gas, H280 GASES UNDER PRESSURE - Compressed gas  
 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B  
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3  
 STOT SE 3, H336i SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Narcotic effects] - Category 3

**SECTION 16: Other information**

<b>Full text of abbreviated R phrases</b>	: <del>R</del> 12- Extremely flammable. R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R34- Causes burns. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50- Very toxic to aquatic organisms. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Full text of classifications [DSD/DPD]</b>	: F+ - Extremely flammable F - Highly flammable C - Corrosive Xn - Harmful Xi - Irritant N - Dangerous for the environment
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