SAFETY DATA SHEET

MA-4000 METAL-KLENE SPRAY

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

1.1. Product identifier Trade name MA-4000 METAL-KLENE SPRAY Product no. 13145 Unique formula identifier (UFI) 9940-Q0S0-J00C-WQ4X 1.2. Relevant identified uses of the substance or mixture and uses advised against ▼ Relevant identified uses of the substance or mixture Degreaser Restricted to professional users. Use descriptors (REACH) **Product category** Description PC 35 Washing and Cleaning Products (including solvent based products) Uses advised against None known. 1.3. Details of the supplier of the safety data sheet Company and address **ITW Spraytec Nordic** Priorsvej 36 DK-8600 Silkeborg Denmark Tel: +45 86 82 64 44 E-mail info@itw-spraytec.dk Revision 01/11/2023 **SDS Version** 3.0 Date of previous version 14/12/2022 (2.0) 1.4. Emergency telephone number Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures". SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated. Skin Irrit. 2; H315, Causes skin irritation. Eye Irrit. 2; H319, Causes serious eye irritation. STOT SE 3; H336, May cause drowsiness or dizziness. Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.
2.2. Label elements Hazard pictogram(s)



Danger	
Hazard statement(s)	
Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)	
Causes skin irritation. (H315)	
Causes serious eye irritation. (H319)	
May cause drowsiness or dizziness. (H336) Toxic to aquatic life with long lasting effects. (H411)	
Precautionary statement(s)	
General	
Prevention	
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. I	No smoking. (P210)
Do not spray on an open flame or other ignition source. (P211)	
Do not pierce or burn, even after use. (P251)	
Use only outdoors or in a well-ventilated area. (P271)	
Wear eye protection/protective gloves. (P280)	
Response	
Storage	
Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. (P410+	P412)
Disposal	-
- Hazardous substances	
Hydrocarbons,C7,n-alkanes,isoalkanes,cyclics	
Acetone	
Additional labelling	
EUH066, Repeated exposure may cause skin dryness or cracking.	
UFI: 9940-Q0S0-J00C-WQ4X	
.3. Other hazards	
Additional warnings	
In the event of leaks, high concentrations of gases can quickly form. They can be toxic,	asphyxiating, or explos
This mixture/product does not contain any substances considered to meet the criteria	
and/or vPvB.	, , , , , , , , , , , , , , , , , , , ,
This product does not contain any substances considered to be endocrine disruptors ir	n accordance with the
criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Re	gulation (EU) 2018/605.
SECTION 3: Composition/information on ingredients	

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hydrocarbons,C7,n- alkanes,isoalkanes,cyclics	CAS No.: 64742-49-0 EC No.: 927-510-4 UK-REACH: Index No.:	50-70%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	[19]
Acetone	CAS No.: 67-64-1 EC No.: 200-662-2 UK-REACH: Index No.: 606-001-00-8	10-30%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
Propane	CAS No.: 74-98-6 EC No.: 200-827-9 UK-REACH: Index No.: 601-003-00-5	5-10%	Flam. Gas 1A, H220	
Butane (<0,1 % w/w 1,3- butadiene)	CAS No.: 106-97-8 EC No.: 203-448-7 UK-REACH: Index No.: 601-004-00-0	3-5%	Flam. Gas 1A, H220	

Carbon dioxide	CAS No.: 124-38-9 EC No.: 204-696-9 UK-REACH: Index No.:	2,5-5%	Press. Gas (Comp.) H280	[1]
Isobutane	CAS No.: 75-28-5 EC No.: 200-857-2 UK-REACH: Index No.: 601-004-00-0	1-3%	Flam. Gas 1A, H220 Press. Gas (Liq.) , H280	[11]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼ Other information

[1] European occupational exposure limit.

[11] The classification as a carcinogen / mutagen will not be taken into account as the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8) (CLP, Annex VI, note K).

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

▼ Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

▼Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the

container may burst.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼ Precautions for safe handling

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

Recommended storage material

Keep only in original packaging.

Storage temperature

< 50°C

Protected from direct sunlight.

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetone

Long term exposure limit (8 hours) (ppm): 500

Long term exposure limit (8 hours) (mg/m³): 1210 Short term exposure limit (15 minutes) (ppm): 1500 Short term exposure limit (15 minutes) (mg/m³): 3620

Butane (<0,1 % w/w 1,3-butadiene) Long term exposure limit (8 hours) (ppm): 600 Long term exposure limit (8 hours) (mg/m³): 1450 Short term exposure limit (15 minutes) (ppm): 750 Short term exposure limit (15 minutes) (mg/m³): 1810 Annotations:

Carc1 = Capable of causing cancer and/or heritable genetic damage if it contains more than 0.1% of buta-1,3-diene.

Carbon dioxide Long term exposure limit (8 hours) (ppm): 5000 Long term exposure limit (8 hours) (mg/m³): 9150 Short term exposure limit (15 minutes) (ppm): 15000 Short term exposure limit (15 minutes) (mg/m³): 27400

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

VDNEL

Acetone		
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	186 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	1210 mg/m ³
Short term – Local effects - Workers	Inhalation	2420 mg/m ³

▼ PNEC

Acetone		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10.6 mg/L
Freshwater sediment		30.4 mg/kg
Intermittent release (freshwater)		21 mg/L
Marine water		1.06 mg/L
Marine water sediment		3.04 mg/kg
Sewage treatment plant		100 mg/L
Soil		29.5 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis. General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Туре	Class	Colour	Standards	
AX		Brown	EN14387	
Skin protection				
No special red Hand protection	quirements.			
Use protective immediately v	e gloves made of type 4 when contaminated.	4H. You may also use dispo	osable gloves made of nitrile if t	hey are replaced
Eye protection Wear safety g	oggles if there is a risk	of eye splash.		
SECTION 9: Physica	al and chemical proper	ties		
	basic physical and che	mical properties		
Physical state Aerosol				
Colour				
Clear				
Odour / Odour th Solvent	hreshold			
pH No data availa	abla			
Density (g/cm ³)	able			
No data availa	able			
Relative density				
No data availa				
Kinematic viscosi No data availa				
Particle characte				
No data availa	able			
hase changes				
Melting point/Fre				
	range (waxes and paste	es) (°C)		
Does not app	ly to aerosols.			
Boiling point (°C)				
No data availa Vapour pressure				
No data availa				
Relative vapour o				
No data availa				
Decomposition to No data availa				
ata on fire and exp				
Flash point (°C)				
No data availa				
Flammability (^o The material i				
Auto-ignition ten	-			
No data availa				
Lower and upper No data availa	^r explosion limit (% v/v) able)		
olubility				
Solubility in wate				
No data availa	able			
n-octanol/water	an officiaust			

Solubility in fat (q/L) No data available 9.2. Other information Evaporation rate (n-butylacetate = 100) No data available Other physical and chemical parameters No data available. Oxidizing properties No data available SECTION 10: Stability and reactivity 10.1. Reactivity No data available. 10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage". 10.3. Possibility of hazardous reactions None known. 10.4. Conditions to avoid Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure. 10.5. Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing agents. 10.6. Hazardous decomposition products The product is not degraded when used as specified in section 1. SECTION 11: Toxicological information 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity Product/substance Acetone Species: Rat Route of exposure: Oral Test: LD50 5800 mg/kg · Result: Skin corrosion/irritation Causes skin irritation. Serious eye damage/irritation Causes serious eye irritation. **Respiratory sensitisation** Based on available data, the classification criteria are not met. Skin sensitisation Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Reproductive toxicity Based on available data, the classification criteria are not met. STOT-single exposure May cause drowsiness or dizziness. STOT-repeated exposure Based on available data, the classification criteria are not met. Aspiration hazard Based on available data, the classification criteria are not met. 11.2. Information on other hazards Long term effects Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼ Endocrine disrupting properties

This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. ▼Toxicity

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available.

 12.3. ▼ Bioaccumulative potential

 Product/substance
 Butane (<0,1 % w/w 1,3-butadiene)</td>

 Potential bioaccumulation:
 No

 LogPow:
 2,8900

 BCF:
 No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. ▼Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

16 05 04* Gases in pressure containers (including halons) containing dangerous substances

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

UN / ID UN proper shipping name Hazard class(es) PG* Env** information ADR UN1950 AEROSOLS Transport hazard class: 2 Label: 2.1 Classification code: 5F - Yes Limit quar restriction code: 5F						
Label: 2.1 quar Classification code: 5F Turr restr code See t addit infor						Other information:
IMDG UN1950 AEROSOLS Transport hazard class: 2 - Yes Limit	ADR	UN1950 AEROSOLS	Label: 2.1 Classification code: 5F	-	Yes	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
	IMDG	UN1950 AEROSOLS	Transport hazard class: 2	-	Yes	Limited

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
		Label: 2.1 Classification code: 5F			quantities: 1 EmS: F-D S-U See below fo additional information.
ATA	UN1950 AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F	-	Yes	See below fo additional information.
Additio ADF	onmental hazards onal information ? / See Table A, section 3.2.1 for any infor a transport. See section 5.4.3, for instruc-				
Additic ADF with acci IME trar IAT/ trar This 14.6. S Not 14.7. N No	onal information R / See Table A, section 3.2.1 for any infor- n transport. See section 5.4.3, for instruc- idents during transport. OG / See section 3.2.1, for any information nsport. A / See Table 4.2 for any information on a nsport. s product is within scope of the regulation ispecial precautions for user applicable. Maritime transport in bulk according to In- data available.	tions in writing regarding mitigation on n on special provisions, requirements special provisions, requirements, or w ns of transport of dangerous goods.	of damages in , or warnings	in conn	to incidents ection with
Additic ADF with acci IMD trar IAT, trar This 14.6. S Not 14.7. N No SECTI 15.1. S Ress I I Der SEV I Resg	onal information A / See Table A, section 3.2.1 for any infor- in transport. See section 5.4.3, for instruc- idents during transport. OG / See section 3.2.1, for any information isport. A / See Table 4.2 for any information on a isport. a product is within scope of the regulation ispecial precautions for user applicable. Maritime transport in bulk according to I	tions in writing regarding mitigation of n on special provisions, requirements special provisions, requirements, or w ns of transport of dangerous goods. MO instruments ions/legislation specific for the substa exposed to this product. ling must not be exposed to this produced leeded to eliminate exposure, must be s quantity (lower-tier): 150 tonnes (net	of damages in , or warnings varnings in co ance or mixtur luct. The risk, e considered.) / (upper-tier)	relation in conn nnection re and pos	n to incidents ection with n with sible technic

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. The Controlled Drugs (Drug Precursors) Regulations 2008. Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law. 15.2. Chemical safety assessment No SECTION 16: Other information Full text of H-phrases as mentioned in section 3 EUH066, Repeated exposure may cause skin dryness or cracking. H220, Extremely flammable gas. H225, Highly flammable liquid and vapour. H280, Contains gas under pressure; may explode if heated. H304, May be fatal if swallowed and enters airways. H315, Causes skin irritation. H319, Causes serious eye irritation. H336, May cause drowsiness or dizziness. H411, Toxic to aquatic life with long lasting effects. The full text of identified uses as mentioned in section 1 PC 35 = Washing and Cleaning Products (including solvent based products) Abbreviations and acronyms ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CE = Conformité Européenne (European conformity) CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EuPCS = European Product Categorisation System EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labelling of Chemicals IARC = International Agency for Research on Cancer (IARC) IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SCL = A specific concentration limit SVHC = Substances of Very High Concern STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ The safety data sheet is validated by

MJH

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en