Safety Data Sheet according to Regulation (EC) No 1907/2006

Revision: 08.06.2017

printing date: 28.10.2019

Replaces version from: 19.06.2015

OPTIMA METAL SURFACE PREPARATION – OPT.MSP250

1.1. Product identifier

OPTIMA METAL SURFACE PREPARATION

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

Intended use:
Product for the conversion treatment of metals

1.3. Details of the supplier of the safety data sheet

LKQ Coatings
Newberry House, Michigan Drive, Tongwell
MK15 8HQ

Phone: +44 1908 611117

optimaproducts@lkqcoatings.com

1.4. Emergency telephone number

Tel: +44 (0)1908 611117 (08.00 / 17.00)
UK: NPIS National Poisons Information Centre
Tel: +44 0344 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements

(CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information EUH210 Safety data sheet available on request.

2.3. Other hazards

None if used properly.
Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
dihydrogen hexafluorotitanate(2-) 17439-11-1	241-460-4 01-2119978266-24	0,1- < 1 %	Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Skin Corr. 1B H314 Acute Tox. 3; Inhalation H331 Met. Corr. 1 H290

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Move to fresh air.
In case of adverse health effects seek medical advice.

Skin contact:
Immediately wash skin thoroughly with soap and water.
In case of adverse health effects seek medical advice.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
No data available.

4.3. Indication of any immediate medical attention and special treatment needed
See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons:
None known

5.2. Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in fires.

5.3. Advice for firefighters
Wear protective equipment.
Wear self-contained breathing apparatus.

Additional information:
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid skin and eye contact.

6.2. Environmental precautions
Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up
Remove with liquid-absorbing material (sand, peat, sawdust).
Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid skin and eye contact.
Ensure that workrooms are adequately ventilated.
See advice in section 8

Hygiene measures:
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities
Store in sealed original container.
Store frost-free.
Store in a cool place.
Keep container tightly sealed.

7.3. Specific end use(s)
Product for the conversion treatment of metals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

None

Occupational Exposure Limits

Valid for
Ireland

None

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
dihydrogen hexafluorotitanate(2-) 17439-11-1	aqua (freshwater)		0,89 mg/l				
dihydrogen hexafluorotitanate(2-) 17439-11-1	aqua (marine water)		0,89 mg/l				
dihydrogen hexafluorotitanate(2-) 17439-11-1	aqua (intermittent releases)		0,074 mg/l				
dihydrogen hexafluorotitanate(2-) 17439-11-1	sediment (freshwater)				16,69 mg/kg		
dihydrogen hexafluorotitanate(2-) 17439-11-1	soil				13 mg/kg		
dihydrogen hexafluorotitanate(2-) 17439-11-1	sewage treatment plant (STP)		1,02 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
dihydrogen hexafluorotitanate(2-) 17439-11-1	Workers	inhalation	Long term exposure - systemic effects		3,6 mg/m3	
dihydrogen hexafluorotitanate(2-) 17439-11-1	Workers	inhalation	Acute/short term exposure - systemic effects		3,6 mg/m3	
dihydrogen hexafluorotitanate(2-) 17439-11-1	Workers	inhalation	Long term exposure - local effects		3,6 mg/m3	
dihydrogen hexafluorotitanate(2-) 17439-11-1	Workers	dermal	Long term exposure - systemic effects		52 mg/kg	
dihydrogen hexafluorotitanate(2-) 17439-11-1	Workers	dermal	Acute/short term exposure - systemic effects		52 mg/kg	

Biological Exposure Indices:
None

8.1. Exposure controls:

Engineering controls:
Ensure good ventilation/suction at the workplace.

Respiratory protection:
In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).
This recommendation should be matched to local conditions.

Hand protection:
Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Protective goggles
Protective eye equipment should conform to EN166.

Skin protection:
Suitable protective clothing
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid clear yellow
Odor	mild
Odour threshold	No data available / Not applicable
pH (20 °C (68 °F); Conc.: 100 % product)	2,4 - 2,8
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	No flash point up to 100°C. Aqueous preparation.
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Relative vapour density:	No data available / Not applicable
Density (20 °C (68 °F))	1,00 - 1,02 g/cm3
Bulk density	No data available / Not applicable

Solubility	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	fully miscible
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts with alkalis: Heat generated.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
No decomposition if used according to specifications.
10.5. Incompatible materials
See section reactivity.

10.6. Hazardous decomposition products
None if used for intended purpose.
In case of fire toxic gases can be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.
To the best of our knowledge no harmful effects are to be expected if the product is handled and used properly.

Skin irritation:
Prolonged or repeated contact may cause skin irritation.

Eye irritation:
Prolonged or repeated contact may cause eye irritation.

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
dihydrogen hexafluorotitanate(2-) 17439-11-1	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1		rat	male/female	95 w, males; 99 w, females continuous	oral: feed	EPA OPP 83-5 (Combined Chronic Toxicity / Carcinogenicity)

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1	NOAEL P = 28,4 mg/kg NOAEL F1 = 28,4 mg/kg	three-generation study oral: drinking water	10 weeks before mating	rat	not specified

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1	NOAEL=ca. 25 ppm	oral: gavage	28 daysonce per day	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.
Do not empty into drains / surface water / ground water.

Other adverse effects:

If acidic or alkaline products are discharged into wastewater installations care must be taken that the discharged wastewater has a pH in the range pH 6 - 10, as pH variations could cause disorders in wastewater channels and biological sewage treatment plants. The local discharge regulations take precedence.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1	LC50	172,4 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
	NOEC	4 mg/l	Fish	21 d	Oncorhynchus mykiss	OECD Guideline 210 (fish early lite stage toxicity test)
dihydrogen hexafluorotitanate(2-) 17439-11-1	EC50	48,2 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
dihydrogen hexafluorotitanate(2-) 17439-11-1	EC50	10,82 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC10	1,31 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
dihydrogen hexafluorotitanate(2-) 17439-11-1	NOEC	231 mg/l	Bacteria	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)
dihydrogen hexafluorotitanate(2-) 17439-11-1	NOEC	3,7 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
dihydrogen hexafluorotitanate(2-) 17439-11-1		53 - 58		not specified		other guideline:

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
dihydrogen hexafluorotitanate(2-) 17439-11-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

060199

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.